



July 30, 2020

Mr. Subash Patel
U.S. Environmental Protection Agency
61 Forsyth Street, SW
Atlanta, Georgia 30303

Subject: Phase 3 Removal Report, Rev. 1
35th Avenue Superfund Site
Technical Direction Document (TDD) No. 0001/OT-01-001
Contract No. EP-S4-15-01

Dear Mr. Patel:

Oneida Total Integrated Enterprises (OTIE), Superfund Technical Assessment Response Team (START), has completed Revision 1 of the Phase 3 Removal report for the 35th Avenue Superfund site in Jefferson County, Birmingham, Alabama.

Please contact me at (678) 355-5550 if you have any questions or comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Russell Henderson", with a long horizontal flourish extending to the right.

Russell Henderson
START Senior Scientist
Project Manager

Enclosure

cc: Katrina Jones, EPA Project Officer
Greg Kowalski, START Program Manager (w/o enclosure)
START File

PHASE 3 REMOVAL REPORT

35TH AVENUE SUPERFUND SITE BIRMINGHAM, JEFFERSON COUNTY, ALABAMA

Revision 1

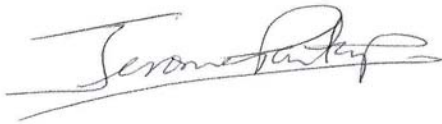
Prepared for:

**U.S. ENVIRONMENTAL PROTECTION AGENCY
Region 4
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ACRONYMN LIST

A.K.A.	Also known as
As	Arsenic
BaP TEQ	benzo(a)pyrene Toxicity Equivalency
BaP	benzo(a)pyrene
bgs	below ground surface
CFR	Code of Federal Regulations
COC	Constituent of Concern
cPAH	carcinogenic Polycyclic Aromatic Hydrocarbons
CV	Collegeville
ERRB	Emergency Response and Removal Branch
ERRS	Environmental Emergency Response Services
FBQSTP	Field Branches Quality System and Technical Procedures
FEMA	Federal Emergency Management Agency
FM	Fairmont
GPS	Global Positioning System
HP	Harriman Park
mg/Kg	milligrams per kilogram
NAAQS	National Ambient Air Quality Standard
NIOSH	National Institute of Occupational Safety and Health
OSC	On-Scene Coordinator
OSHA	Occupational Health and Safety Administration
OTIE	Oneida Total Integrated Enterprises
PAH	polycyclic aromatic hydrocarbons
Pb	Lead
PM ₁₀	particulate matter
ppm	parts per million
QAPP	Quality Assurance Project Plan
RCRA	Resource Conservation and Recovery Act
RML	Removal Management Levels
START	Superfund Technical Response Team
TCL	Target Compound List
TCRA	Time-Critical Removal Action
TDD	Technical Direction Document
µg/m ³	micrograms per cubic meter
USEPA	United States Environmental Protection Agency
XRF	X-Ray Fluorescence

EXECUTIVE SUMMARY

Oneida Total Integrated Enterprises (OTIE), Superfund Technical Assessment and Response Team (START), is presenting the Phase 3 Removal report in support of the Time-Critical Removal Action (TCRA) at the 35th Avenue Superfund Site, located in Birmingham, Jefferson County, Alabama (the site). The study area for the site encompasses over 2,000 residential and residential-use (childcare facilities; church playgrounds; city properties, schools and playgrounds) parcels located in the neighborhoods of Fairmont, Collegeville, and Harriman Park. The extent of the study area encompasses the area south of 49th Street, east of 26th Street/Highway 31, north of 27th Avenue, and west of the railroad lines. It is a mixture of residential properties surrounded by industrial facilities historically associated with limestone quarry operations, foundries, recycling, and coke and chemical manufacturing operations. Previous investigations have shown elevated levels of polycyclic aromatic hydrocarbon (PAH) compounds, arsenic, and lead in surficial soils. Unless specifically identified in this report, the residential and residential-use parcels located within this boundary will be collectively referred to as “35th Avenue Superfund Site”.

The work, conducted by START under Contract Number (No.) EP-S4-15-01, TDD No. 0001/OT-01-001, includes monitoring and documenting the removal activities at residential-use properties where previous sampling by United States Environmental Protection Agency (USEPA) Emergency Response, Removal, and Protection Branch (ERRPB) indicated high concentrations of PAH primarily benzo(a)pyrene (BaP), arsenic, and/or lead in the surficial soils.

This Phase 3 Removal report summarizes the field monitoring activities conducted by START from March 2015 through July 2015.

The Phase 3 removal activities are comprised of 34 properties where soil concentrations exceeded approximately 2 times the carcinogenic contaminants of 1.5 milligrams per kilogram (mg/kg) for PAH, 61 mg/kg for arsenic, and/or 400 mg/kg for lead.

There may be some discrete locations below the excavation effort that exceeded the cleanup goals used for shallow soil. However, based on the depth of these detections and the cleanup goals in the removal action, the action taken by EPA is protective for human exposures to surface soils.

Real-time air monitoring data for particulates (PM_{2.5}) did not indicate an exceedance of the action levels over the duration of the Phase 3 removal activities. Additionally, air sampling analytical results did not indicate detectable arsenic/lead or PAH concentrations above the exceedance levels.

1.0 SCOPE

1.1 OVERVIEW

The Oneida Total Integrated Enterprises (OTIE) Superfund Technical Assistance and Response Team (START) was tasked by the United States Environmental Protection Agency (USEPA) Region 4 to monitor and document removal activities in support of the Phase 3 of a Time-Critical Removal Action (TCRA) at the 35th Avenue Superfund Site, located in Birmingham, Jefferson County, Alabama. The general purpose of a TCRA is to remove or minimize potential threats to human health or the environment in response to a release of a hazardous substance. The scope of this Phase 3 removal was to excavate 34 residential-use properties with levels of polycyclic aromatic hydrocarbons (PAH) and/or arsenic in the surficial soils exceeding approximately 2 times the 10^{-4} and/or Hazard Quotient (HQ) =1 risk levels for direct contact with residential soil [1.5 milligrams per kilogram (mg/kg) for PAH, 61 mg/kg for arsenic] and/or lead in surficial soils exceeding 400 mg/kg. The work was conducted under Contract Number (No.) EP-S4-15-01, Technical Direction Document (TDD) No. 0001/OT-01-001.

START was tasked with monitoring and documenting the removal activities at residential-use properties where excavation activities were conducted. Monitoring activities at each excavation property included implementing air monitoring procedures as approved in the Air Monitoring Work Plan dated April 22, 2014 (Ref. 1), and documenting site activities with field notes and photographs. START also assisted the USEPA Emergency Rapid Response Services (ERRS) contractor (CMC, Inc.) with property boundary delineation and soil screening for metals using an X-Ray Fluorescence (XRF) instrument, as needed.

All activities and procedures conducted by START were performed in accordance with the USEPA Region 4 Field Branches Quality Standards Technical Procedures (FBQSTP) and the site-specific Quality Assurance Project Plan (QAPP) approved on February 27, 2014 (Refs. 2; 3).

This Phase 3 Removal report summarizes the field monitoring activities conducted by START from March 2015 through July 2015.

1.2 PROJECT APPROACH

The study area for the site is a mixture of residential properties surrounded by industrial facilities historically associated with limestone quarrying, foundries, recycling, and coke and chemical manufacturing operations. It encompasses approximately 2,000 residential and residential-use (childcare facilities; church playgrounds; city properties, schools and playgrounds) parcels located north of 27th Avenue and 27th Court North, east of 29th Street

North, Fairmont Place and Cheek Road, south of 49th Avenue North/Sumiton Crest Road and west of the railroad lines (Figures 1 and 2, Appendix A).

Previous investigations at the site indicated the presence of elevated levels of carcinogenic PAHs primarily Benzo(a)pyrene, arsenic and/or lead in the surficial soils. Thirty-four (34) residential-use properties where previous sampling by USEPA Emergency Response, Removal, and Protection Branch (ERRPB) indicated high concentrations of PAH, arsenic, and/or lead in the surficial soils, or that are located between two adjacent parcels where these exceedances were noted, were selected by USEPA for Phase 3 TCRA. Table 1 provided in Appendix B summarizes the parcels selected for Phase 3 TCRA removal. Three additional properties (CV-0378, CV-0511, and HP-0006) were not included in this phase of the TCRA. The owners for CV-0378 and HP-0006 refused removal actions. CV-0511 (former Carver High School) is the current staging area for 35th removal activities and will be removed once excavation activities for the entire TCRA have been completed.

Soils were excavated to pre-determined depths based on previous depth sampling investigations conducted by START at each impacted parcel, results of which are presented under separate cover (Ref. 4). Soils were either excavated down to 24 inches below ground surface (bgs) which is considered protective of human health and the environment, or to the pre-determined depth. However, where contamination was observed at depths less than or greater than the pre-determined depth (not to exceed 24 inches), it was at the discretion of the On-Scene Coordinator (OSC) to designate the depth sufficient to remove contaminated material at an individual parcel. There may be some discrete locations below the excavation effort that exceed the cleanup goals used for shallow soil. However, based on the depth of these detections and the cleanup goals in the TCRA, the action taken by EPA is protective for human exposures to surface soils.

Horizontal delineation was determined in the field by way of in-situ screening using a Niton XL3t GOLDD+ XRF analyzer. This aided in the decision making process to determine the necessary extent of excavation. When excavating around trees, special attention was given to protect the tree root system.

An air monitoring program was established for implementation during soil removal and staging activities and results from these activities are included in this report.

1.3 REPORT ORGANIZATION

The site background information that guided the sampling approach is presented in Section 2. The procedures for property removal and the general field monitoring activities are summarized in Section 3. Specific details on the removal actions for each parcel are provided in Section 4. The results of the air monitoring activities are provided in Section 5. Final conclusions are discussed in Section 6. References are cited throughout the report to substantiate site-specific statements. A reference list is provided in Section 7.0.

Figures and tables are provided as Appendices A and B, respectively. XRF screening results are provided in Appendix C. A photographic log for each of the removal properties is provided as Appendix D and copies of the field logbook notes are presented in Appendix E. The laboratory reports are presented in Appendix F.

2.0 BACKGROUND

The following presents the general site description, background historical information, and the 36 Phase 3 removal property descriptions.

2.1 SITE DESCRIPTION

The site encompasses three residential neighborhoods: Fairmont, Collegeville, and Harriman Park, in Birmingham, Jefferson County Alabama (Appendix A, Figure 2). The geographic coordinates for the approximate center of the site are 33.561625 North latitude and -86.802568 West longitude. The Fairmont neighborhood comprises the western portion of the site, Collegeville the southern portion, and Harriman Park the eastern portion.

Residential dwellings in the Collegeville neighborhood and the Hudson School were present as late as 1929 based on a review of a Sanborn Fire Insurance Map for the same year (1929, V. 9, Sheets 953 and 954). The Harriman Park neighborhood was constructed in the early 1950's based on a review of the 1951 aerial photograph of North Birmingham (CPM 6H-25). Construction of residential dwellings in the Fairmont neighborhood appear to have begun as late as 1951 and continued through the late 1970's (Ref. 4).

The site lies within the Birmingham Valley District of the Alabama Valley and Ridge Physiographic section (Appendix A, Figure 1). The Birmingham Valley is bounded by Sands Mountain to the northwest and Red Mountain to the southeast. Elevations at the site range from approximately 650 feet above mean sea level (amsl) in the Fairmont neighborhood to 560 feet amsl in Harriman Park.

According to the FEMA, a large portion of the Collegeville neighborhood is located in a 100-year flood plain (Flood Plain Panel 01073C).

2.2 SITE HISTORY

In April 2005, CH2MHill, on behalf of Sloss Industries (Sloss), conducted supplemental off-site soil sampling as part of an effort to complete Environmental Indicator (EI) determinations at the Sloss Industries facility (currently ERP Compliant Coke, LLC). One surface soil sample (0- to 2-foot interval) was collected from each of the thirty-five (35) properties (homes, schools, and a park) within residential areas adjacent to the facility. The analytical results showed elevated concentrations of individual carcinogenic PAHs (cPAHs) and arsenic in several soil

samples. CH2MHill concluded that off-site soils were affected by benzo(a)pyrene and that the concentrations of benzo(a)pyrene decreased with increasing distance from the Sloss facility. However, because low-level PAH concentrations are anthropogenic (associated with urban environments), they recommended that background soil samples be collected from undisturbed locations, unaffected by the site, in order to assess the natural concentrations of PAHs in the general area. They also concluded that the elevated concentrations of arsenic detected in off-site soils were generally naturally occurring (Ref. 5).

In July 2009, CH2MHill, on behalf of ERP Compliant Coke, LLC (formerly Walter Coke), assessed the surface soils at 65 residential properties, a Public Housing, a right-of-way, a church, a drainage ditch from the Walter Coke property to Harriman Park, an off-site Walter Coke property, and four schools (the former Carver High School, the former Hudson School, Riggins Alternative School, and the Calloway Head Start School) as part of a voluntary cooperation effort between the USEPA Resource Conservation and Recovery Act (RCRA) and ERP Compliant Coke, LLC. Results indicated that surface soils at portions of 23 of the properties exhibited Benzo(a)Pyrene Toxic Equivalent Quotient (BaP TEQ) values exceeding 1.5 mg/kg and/or sieved arsenic values exceeding 37 mg/kg (Ref. 6).

In September 2010, USEPA Science and Ecosystems Division (SED) conducted background sampling in and around the Robinwood Neighborhood in response to Walter Coke's position that the PAHs detected in residential soil samples they collected in 2005 and 2009 are the result of years of contribution from multiple sources, both non-industrial and industrial; and, in the case of arsenic, naturally occurring in the rock and soil. Twenty (20) sample locations were selected and sampled in and around the Robinwood area ranging from 4.5 to 9 miles northeast of Walter Coke. Thirteen of the locations had BaP TEQ values less than 0.1 mg/kg; four locations had BaP TEQ values between 0.1 mg/kg and 0.5 mg/kg; two locations had BaP TEQ values between 0.5 mg/kg and 1.0 mg/kg; and one location had a BaP TEQ greater than 1.0 mg/kg (1.1 mg/kg). All but one location had surface soil arsenic concentrations below 6 mg/kg (Ref. 7).

The Hudson School was under construction during the 2009 sampling event; as such Walter Coke elected to resample soil at the school property in September 2010 after construction of the new school was completed. Five point composite surface soil samples were collected from 14 areas (each consisting of ¼ to ½ acre) on the new Hudson School property. Three of the 14 locations had BaP TEQ greater than 1.5 mg/kg (Ref. 8).

In January 2011, CH2MHill submitted to Walter Coke a Technical Memorandum summarizing the work to remove soils contaminated with cBaP at Riggins School and Hudson School (Ref. 9). Following receipt of School Board approvals and access, work began at Hudson School on March 10, 2011, and site restoration was completed on June 8, 2011. Approximately 52,000 cubic feet of soil were removed from the Hudson School property and replaced with imported backfill. Surface soil was removed to a depth of 2 feet bgs (Ref. 10). There is no file material available to document a removal at the Riggins School.

In June 2011, CH2MHill, on behalf of Walter Coke, submitted a Remedial Action Work Plan to remove residential surface soils identified as exceeding the USEPA's cleanup levels at 23 residential properties located within the Harriman Park and Collegeville neighborhoods pursuant to agreements reached between Walter Coke and USEPA RCRA Region 4 (Ref. 11). Removal activities, including the excavation and replacement of soils with clean fill were completed at 16 of the 23 properties. The property declined access (Ref. 12).

From November 2012 through June 2013, the surface soils of 1,116 residential and residential-use parcels were sampled as part of the EPA ERRPB Removal Investigation. Sampling was conducted to identify the nature and extent of contamination in the surface soils (0-4 inches bgs) of parcels located within the study boundary of the site. A total 3,160 (2,976 composite and 184 grab) surface soil samples were collected primarily for BaP TEQ and RCRA metals analysis. Field samples were screened ex situ for RCRA metals concentrations using a Niton XL3t XRF instrument to efficiently identify properties with elevated concentrations in soil. A portion of 1,823 field samples were sieved using a 2-millimeter sieve, and screened in order to assess the lead uptake of the contamination. Of the 3,160 soil samples collected, all but three were analyzed for Target Compound List (TCL) PAH. XRF field screening results and laboratory analytical data showed arsenic and/or lead concentrations exceeding the Removal Management Levels (Clean up goals) dated July 2012 for direct contact with residential soil in 450 locations within 324 parcels. Analytical data show elevated levels of BaP TEQ at concentrations exceeding the clean up goals of 1.5 mg/kg in 145 locations within 102 parcels (Ref. 4).

On September 25, 2013, EPA issued an Action Memorandum requesting a TCRA at the 35th Avenue Site (Ref. 13). The proposed action included excavation of contaminated soils up to 12 inches bgs at those parcels that far exceed the clean up goals (last update: December 2012). An amendment was issued on March 12, 2014 that limited the TCRA to those parcels that exceeded by threefold or a magnitude of 10, the December 2012 clean up goals for the three contaminants of concern and it expanded the maximum excavation depth to 24 inches bgs (Ref. 14).

On February 17, 2017, OTIE submitted Revision 1 of the Phase 3 Removal Depth Sampling report which summarized the relevant data and findings of the field investigation activities conducted by START from January 5, 2015 through May 19, 2015. Soil sampling activities were conducted at 32 residential-use properties where previous sampling by USEPA ERRPB indicated levels of PAH and/or arsenic in the surficial soils exceeding approximately 2 times the 10^{-4} and/or HQ=1 risk levels for direct contact with residential soil (1.5 mg/kg for PAH, 61 mg/kg for arsenic) and/or lead in surficial soils exceeding 400 mg/kg. One additional property was included at the time of the investigation because it was located adjacent to, and provided access for, a property in the Phase 3 TCRA. Samples were collected from the 6-inch, 12-inch, 18-inch, and 24-inch bgs depths. The analytical data gathered during this field investigation provided USEPA with information to determine an appropriate depth which removal could be conducted at 45 locations comprising the 33 parcels identified for Phase 3 Removal Depth sampling as part of the TCRA.

2.3 REGIONAL GEOLOGY

The site is located within the Valley and Ridge physiographic province of the State. More specifically, the site is within the Birmingham-Big Canoe Valley District with elevations ranging from approximately 500 feet in Jefferson County to approximately 600 feet in neighboring St. Clair County. The geology and physiography of this province is quite complex because the region was strongly affected by large-scale tectonic activity during the Appalachian orogeny. The site is in the Appalachian fold and thrust belt, consisting of shallow marine to deltaic Paleozoic sedimentary strata deposited on a continental platform. Regionally, strata generally strike to the northeast-southwest with southeast dip. Across strike, the fold and thrust belt is characterized by folds associated with large thrust-fault ramps. Regionally, the ridges dividing the valleys and the rock types that cap them are as follows: Weisner ridges, quartzite; western edge of the Northern Piedmont, slate; Cahaba ridges, sandstone and conglomerate; and Blount Mountain, sandstone. These rocks are highly resistant to weathering, are not significantly faulted, and are relatively impermeable (Ref. 16).

2.4 HYDROGEOLOGY

The site is underlain by the Valley and Ridge aquifer system. The Valley and Ridge aquifer system is comprised of aquifers consisting of limestone, sandstone, and fractured rock that are exposed in valleys and separated by ridges. The complex geologic structure of the area has caused regional discontinuity of rock units so major aquifers or aquifer systems are not continuous. A given major aquifer may be present in adjacent valleys; however, the two valleys may not be hydraulically connected due to faulting or folding. The water-bearing formation within the aquifer system at the site is the Conasauga Formation. Limestone of the Conasauga Formation in the Birmingham-Big Canoe Valley yields substantial amounts of water where the dominantly calcareous and steeply dipping strata contain well-developed dissolution channels. Groundwater flow is primarily from the higher altitudes adjacent to the ridges toward the center of the valleys. In addition, ground water moves "down valley" in the direction of streamflow. Groundwater recharge is through the infiltration of precipitation, mostly rain supplemented by occasional snow. Most other rock units of Cambrian to Devonian age are included within the Valley and Ridge aquifer system because they do not form effective barriers to ground water movement among permeable units of the Valley and Ridge aquifer system. However, these other units also are not significant sources of ground water (Ref. 16).

3.0 CHARACTERIZATION METHODS AND PROCEDURES

The following sections describe the field activities performed by START as part of this phase of the Removal Action. START documented all field activities with logbook notes and photographs.

3.1 PROPERTY BOUNDARY DELINEATION

Prior to excavation activities, START field personnel uploaded the parcel identification maps provided by the Jefferson County Tax Assessors Office to a Trimble® Global Positioning System (GPS) instrument equipped with ESRI ArcMap®. START personnel used the parcel identification maps to mark property boundaries. Each identification marker was tagged with the USEPA Property Identification and depth to be removed.

3.2 AIR MONITORING

An Air Monitoring Work Plan (AMWP) was generated for the purpose of conducting air monitoring activities during removal efforts at residential locations and stockpiling activities at the staging area. Previous investigations at the site indicate the presence of elevated levels of RCRA metals associated with coke plant waste. Based on the presence and general toxicity of metals, primarily lead and arsenic, the two contaminants were selected as the target RCRA metal analytes to be included in the ambient air quality monitoring program. In addition to the two primary RCRA metals of concern, PAHs was also included in the ambient air quality monitoring program.

Real-time air quality monitoring, in conjunction with confirmatory air sampling and laboratory analysis, was performed at residential locations and at the staging area during removal activities. Real-time air monitoring and site-specific action levels are designed to be protective of individuals within the vicinity of removal activities. Real-time air monitoring was used as an early warning system to prevent off-site exposures to elevated levels of site contaminants and document conditions occurring during removal activities on site and at the staging area.

In addition to real-time air quality monitoring, personnel air sampling was conducted to ensure that personnel working directly within work zones at the residential and staging area were not exposed to metals and/or PAHs that may be present within the breathing zone. The personnel air samples were submitted to Analytical Environmental Services (AES) in Atlanta, Georgia under standard chain-of-custody procedures for laboratory analysis.

DataRAMs and DustTraks instruments with data logging capabilities were used during excavation operations to monitor air quality. Real-time monitoring was performed continuously for prevailing upwind and downwind locations. Real-time monitoring was conducted each operational work day during periods of heavy equipment operations (handling of soil).

The real-time monitoring action level selected for PM_{2.5} is 150 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) and is based on the National Ambient Air Quality Standards (NAAQS) provided in Title 40 of the CFR Part 50. The NAAQS for PM_{2.5} is averaged over a 24-hour time period. The PM_{2.5} action level for the site is set at 150 $\mu\text{g}/\text{m}^3$ averaged over a one-hour time period.

A PM_{2.5} value of 150 $\mu\text{g}/\text{m}^3$ was used to trigger alarms on the instruments to alert work personnel if excessive dust was generated from the excavation activities. If the alarms were triggered ERRS would implement engineering controls.

At a minimum, two lead and/or arsenic air samples, one from the Residential Area and one from the Staging Area, were collected each week based on weather conditions for laboratory analysis. Air samples for lead and arsenic analysis were collected using a Gilian GilAir-3 with a 0.8-micron pore size Mixed Cellulose Ester (MCE) filter enclosed in a 25 millimeter (mm) diameter cassette with a diffuser pad. These samples were submitted to AES and were analyzed by National Institute for Occupational Safety and Health (NIOSH) Method 7300, Inductively Coupled Argon Plasma, Atomic Emission Spectroscopy (ICP-AES).

Two PAH samples, one from the Residential Area and one from the Staging Area was also collected each week based on weather conditions for laboratory analysis. The air samples for PAH analysis were collected using an SKC Universal XR Pump Model 44XR with a 2.0- μm sized polytetrafluoroethylene filter enclosed in a 25 mm diameter cassette with a diffuser pad and a sorbent tube (XAD-2). The samples were labelled using the assigned property identification and submitted to AES and analyzed by NIOSH Method 5506. The results of the air monitoring activities are discussed in Section 5.0 and summarized in Tables 2 and 3.

3.3 HORIZONTAL AND VERTICAL DELINEATION

START established removal depth values for each property based on laboratory data. Removal depths ranged from 6-inches to 24-inches bgs. During excavation activities if soils appear to be consistent with the removed portion or suspicious in appearance, an XRF was used to field screen insitu the base of the excavation. If the screening results indicated concentrations above the Cleanup Goals established for the site further excavation was conducted and the area re-screened. However if the initial removal depth was at 24-inches the XRF was used to confirm concentrations at the base of the excavation. The XRF results are tabulated by removal property, where applicable, in Section 4.0, and presented in Appendix C.

4.0 REMOVAL ACTIONS

The following sections summarize the removal actions documented by START at each property segregated by neighborhoods. A list of the Phase 3 properties is included on Table 1. Maps showing the properties are presented as Figures 3 through 5 in Appendix A. Photologs for each property is included in Appendix D and the logbook notes are presented in Appendix E.

Prior to excavation activities utility locates were requested by ERRS for each property. Any soils uncovered near utilities during the excavation activities were removed manually. An XRF was utilized to screen arsenic and lead concentrations in-situ as necessary. On a daily basis reference standards (RCRA and SiO₂) were read with the XRF unit to check the performance. The reference standard readings were recorded in the logbook notes.

4.1 COLLEGEVILLE

Listed below are the 28 Phase 3 TCRA properties removed in the neighborhood Collegeville. A description of the activities conducted is presented for each property removed.

- **CV0045 – 3436 30th Way North**

The property is approximately 12,333 square feet (ft²) and located at coordinates 33.559485°N and -86.806631°W. A single-story structure occupies the property. The property is bordered to the north and south by residential properties, west by a commercial lot, and east by 30th Way North.

Excavation activities began on May 19, 2015 and were completed on May 27, 2015. Based on depth sampling laboratory data, benzo(a)pyrene was the primary compound of concern at this property. Removal activities were conducted on the back yard (CV0045B) to a final depth of 6-inches bgs. A total of 121 cubic yards of soil was removed, backfilled with clean soil, and sodded with grass on the surface.

- **CV0104 – 3414 31st Place North**

The property is approximately 5,735 ft² in size and located at coordinates 33.558813°N and -86.805156°W. A single-story structure occupies the property. The property is bordered to the south by a vacant lot, north by residential properties, west by 31st Alley North, and east by 31st Place North.

Excavation activities began on May 11, 2015 and were completed on May 13, 2015. Removal activities were conducted on the front yard (CV0104A), back yard (CV0104B), and southern side yard (CV0104C) to a final depth of 6-inches bgs. Based on the depth sampling laboratory data, benzo(a)pyrene was the primary compound of concern at this property. A total of 76 cubic yards of soil was removed, backfilled with clean soil, and sodded with grass on the surface.

- **CV0162 – 3338 31st Way North**

The property is approximately 5,463 ft² in size and located at coordinates 33.557246°N and -86.804227°W. A single-story structure occupies the property. The property is bordered to the north by a vacant lot, south and west by residential properties, and east by 31st Way North.

Excavation activities began and were completed on May 8, 2015. Based on depth sampling laboratory data, benzo(a)pyrene was the primary compound of concern at this property. Removal activities were conducted on the front yard (CV0612A) to a final depth of 6-inches bgs. A total of 16 cubic yards of soil was removed, backfilled with clean soil, and sodded with grass on the surface.

- **CV0197 – 3404 32nd Avenue North**

The property is approximately 12,263 ft² in size and located at coordinates 33.554606°N and -86.797891°W. The location is bordered to the west by a vacant lot, south by 32nd Avenue North, and to the north and east by residential properties.

Excavation activities began on March 18, 2015 and were completed on March 19, 2015. Based on depth sampling laboratory data, arsenic was the primary compound of concern at the property. Removal activities were conducted on the backyard (CVA0197C) to a final depth of 18-inches bgs. A total of 289 cubic yards of soil was removed from the property, backfilled, and sodded with grass on the surface.

An XRF was used to screen the soils at 18-inches bgs within the removal area. The XRF results are shown in the table below.

Reading #	Lead Result (ppm)	Arsenic Result (ppm)
Blank	5 ± 3	<LOD ± 3
RCRA Std.	484 ± 17	428 ± 16
116	11 ± 4	8 ± 3

Notes:

ppm – parts per million

<LOD – less than the XRF limit of detection

- **CV0225 – 3321 32nd Place North**

The property is approximately 6,930 ft² in size and located at coordinates 33.556310°N and -86.801438°W. A single-story structure occupies the property. It is bordered to the north, east, and south by residential properties; and west by 32nd Place North.

Excavation activities began on July 13, 2015 and were completed on July 17, 2015. Based on depth sampling laboratory data, lead was the primary compound of concern at this property. Removal activities were conducted

on the back yard (CV0225B) to a final depth of 24-inches bgs. A total of 348 cubic yards of soil was removed from this property, backfilled with clean soil, and sodded with grass.

- **CV0227 – 3325 32nd Place North**

The property is approximately 7,195 ft² in size and located at coordinates 33.556424°N and -86.801430°W. A single-story structure occupies the property. The property is bordered to the north and south by residential properties, west by 32nd Place North, and east by 32nd Alley North.

Excavation activities for the back yard (CV0227B) began and were completed on July 13, 2015. Excavation activities for the front yard (CV0227A) began and were completed on July 23, 2015. Based on depth sampling laboratory data, lead was the primary compound of concern at this property. The back yard was excavated to a final depth of 24-inches bgs and the front yard excavated to a final depth of 6-inches bgs. A total of 254 cubic yards of soil was removed, backfilled with clean soil, and sodded with grass on the surface.

- **CV0252 – 3301 32nd Street North**

The property is approximately 20,761 ft² in size and located at coordinates 33.555664°N and -86.802446°W. Collegeville Church of Christ occupies this property. The property is bordered to the north and west by residential properties, west by 32nd Street North, and south by 33rd Avenue North.

During surface and depth sampling events, exposed ground surface on the south side of the church was screened using the XRF (Readings #131-134). A small patch on the opposite side of the main walkway was also screened (Readings #135-137). Other readings were taken at a small area of exposed soil near the entrance to the church (Readings #128-130). START decided to XRF these areas once the original removal depth of 18-inches bgs was reached. The XRF readings are presented in the table below.

Reading #	Lead Result (ppm)	Arsenic Result (ppm)
Blank	8 ± 3	<LOD ± 3
RCRA	499 ± 18	421 ± 16
128	1355 ± 27	52 ± 20
129	718 ± 21	99 ± 16
130	424 ± 14	23 ± 10
131	409 ± 13	19 ± 10
132	391 ± 13	20 ± 10
133	500 ± 15	26 ± 11
134	84 ± 11	<LOD ± 13
135	88 ± 7	12 ± 5
136	193 ± 8	21 ± 6
137	80 ± 6	7 ± 5

Excavation activities began and were completed on June 15th, 2015. Based on depth sampling laboratory data, lead was the primary compound of concern to a depth of 18-inches bgs however, XRF readings showed lead was still above the Cleanup Level in some areas which prompted excavation to a total depth of 24-inches bgs. XRF samples were taken again at 24-inches bgs within the excavated area. The XRF readings are presented in the table below.

Reading #	Lead Result (ppm)	Arsenic Result (ppm)
142	468 ± 15	37 ± 12
143	1258 ± 26	102 ± 20
144	724 ± 20	41 ± 15
145	453 ± 14	26 ± 14
146	669 ± 18	28 ± 13

Notes:

ppm – parts per million

<LOD – less than the XRF limit of detection

A total of 90 cubic yards of soil was removed from the property, backfilled with clean soil, and sodded with grass on the surface.

- **CV0254 – 3313 32nd Street North**

The property is approximately 6,961 ft² in size and located at coordinates 33.556071°N and -86.802564°W. A single-story structure occupies the property. It is bordered to the north and east by residential properties, south by the Collegeville Church of Christ, and west by 32nd Street North.

Excavation activities began on June 5, 2015 and were completed on June 12, 2015. Based on the depth sampling laboratory data, benzo(a)pyrene and lead were the primary compounds of concern at this property. Removal activities were completed on the front yard (CV0254A) to a final depth of 24-inches bgs and on the backyard (CV0254B) to a final depth of 12-inches bgs. A total of 351 cubic yards of soil was excavated from this property, backfilled with clean soil, and sodded with grass.

- **CV0256 – 3321 32nd Street North**

The property is approximately 13,519 ft² in size and located at coordinates 33.556267°N and -86.802519°W. A single-story structure occupies the property. It is bordered to the north, east, and south by residential properties; and west by 32nd Street North.

Excavation activities began and were completed on July 18, 2015. Based on depth sampling laboratory data, arsenic was the primary compound of concern at this property. Removal activities were conducted on the backyard (CV0256E) to a final depth of 24-inches bgs. A total of 64 cubic yards of soil was removed from this property, backfilled with clean soil, and sodded with grass.

- **CV0305 – 3431 33rd Avenue North**

The property is approximately 6,177 ft² in size and located at coordinates 33.555089°N and -86.797034°W. A single-story structure occupies this property, which is bordered to the east and south by vacant lots, to the west by a residential property, and to the north by 33rd Avenue North.

Excavation activities began on May 4th, 2015 and were completed on May 6th, 2015. Based on the depth sampling laboratory data, benzo(a)pyrene was the primary compound of concern at this property. Removal activities were conducted on the backyard (CV0305B) to a final depth of 12-inches bgs. A total of 132 cubic yards of soil was removed, backfilled with clean soil, and sodded on the surface with grass.

- **CV0312 – 3449 33rd Avenue North**

The property is approximately 5,875 ft² in size and located at coordinates 33.555076°N and -86.796341°W. A single-story structure occupies the property, which is bordered to the west and south by residential properties, north by 33rd Avenue, and east by 35th Street.

During excavation activities, blue material was encountered along the southeastern portion property boundary. The XRF was used to screen this area. The XRF results are shown below.

Reading #	Lead Result (ppm)	Arsenic Result (ppm)
CV0312A-1	143 ± 11	96 ± 10
CV0321A-2	20 ± 5	43 ± 5

Notes:

ppm – parts per million

<LOD – less than the XRF limit of detection

Excavation activities began on April 14, 2015 and were completed on April 22, 2015. Based on the depth sampling laboratory data, arsenic and benzo(a)pyrene were the primary compounds of concern at this property. Removal activities were conducted on the front yard (CV0312A) to a final depth of 12-inches bgs. A total of 151 cubic yards of soil was removed from the property, backfilled with clean soil, and sodded on the surface with grass.

- **CV0339 – 3420 33rd Court North**

The property is approximately 5,971 ft² in size and located at coordinates 33.556200°N and -86.797329°W. A single-story structure occupies the property. It is bordered to the east, north, and west by residential properties; and south by 33rd Court North.

Excavation activities began on July 24, 2015 and were completed on July 31, 2015. Based on the depth sampling laboratory data, benzo(a)pyrene was the primary compound of concern at this property. Removal activities were

conducted on the back yard (CV0339B) to a final depth of 12-inches bgs. A total of 140 cubic yards of soil was removed from this property, backfilled with clean soil, and sodded on the surface with grass.

- **CV0341 – 3428 33rd Court North**

The property is approximately 6,359 ft² in size and located at coordinates 33.556357°N and -86.797175°W. The property is vacant, and is located within the fence surrounding parcel CV0339. The property is bordered to the north, east, and west by residential properties; and south by 33rd Court North.

Excavation activities began on July 24, 2015 and were completed on July 31, 2015. Based on depth sampling laboratory data, lead was the primary compound of concern at this property. Removal activities were conducted on the backyard (CV0341B) to a final depth of 6-inches bgs. A total of 59 cubic yards of soil was removed from this property, backfilled with clean soil, and sodded on the surface with grass.

- **CV0401 – 3369 33rd Place North**

The property is approximately 6,158 ft² in size and located at coordinates 33.557785°N and -86.799239°W. A single-story structure occupies the property. The property is bordered to the north, east and south by residential properties; and to the west by 33rd Place North.

Excavation activities began on June 1, 2015 and were completed on June 5, 2015. Based on the depth sampling laboratory data, benzo(a)pyrene was the primary compound of concern at this property. Removal activities were conducted on the back yard (CV0401B) to a final depth of 24-inches bgs. A total of 222 cubic yards of soil was removed, backfilled with clean soil, and sodded with grass on the surface.

- **CV0408 – 3384 33rd Place North**

The property is approximately 5,085 ft² in size and located at coordinates 33.558148°N and -86.799708°W. A single-story structure occupies the property. The property is bordered to the north, west and south by residential properties; and to the east by 33rd Place North.

Excavation activities began and were completed on March 20, 2015. Based on the depth sampling laboratory data, benzo(a)pyrene was the primary compound of concern. Removal activities were performed on the front yard (CV0408A) to a final depth of 12-inches bgs. A total of 41 cubic yards of soil was removed from this property, backfilled with clean soil, and sodded with grass on the surface.

- **CV0500 – 3021 33rd Terrace North**

The property is approximately 6,340 ft² in size and located at coordinates 33.556870°N and -86.808058°W. A single-story structure occupies the property. It is bordered to the east and south by residential properties, west by a vacant lot, and north by 33rd Terrace North.

Excavation activities began and were completed on April 8, 2015. Based on depth sampling laboratory data, benzo(a)pyrene was the primary compound of concern at this property. Removal activities were conducted on the front yard (CV0500A) to a final depth of 6-inches bgs. A total of 31 cubic yards of soil was removed from this property, backfilled with clean soil, and sodded with grass on the surface.

- **CV0503 – 3035 33rd Terrace North**

The property is approximately 6,352 ft² in size and located at coordinates 33.556865°N and -86.807535°W. A single-story structure occupies the property. It is bordered to the west, south, and east by residential properties; and north by 33rd Terrace North.

Excavation activities began on April 22, 2015 and were completed on April 27, 2015. Based on depth sampling laboratory data, arsenic was the compound of concern in the front yard (CV0503A), and benzo(a)pyrene was the compound of concern in the back yard (CV0503B) of this property. Removal activities were conducted on both the front and back yard to a final depth of 12-inches bgs. A total of 161 cubic yards of soil was removed from the property, backfilled with fresh soil, and sodded with grass on the surface.

- **CV0523 – 3030 34th Avenue North**

The property is a vacant lot that is approximately 4,999 ft² in size and located at coordinates 33.558690°N and -86.807373°W. The property is bordered to the north and east by residential properties, west by a commercial property, and south by a vacant lot.

Excavation activities began on May 1, 2015 and were completed on May 5, 2015. Based on depth sampling laboratory data, benzo(a)pyrene was the primary compound of concern at this property. Removal activities were conducted across the entire property (CV0523A) to a final depth of 8-inches bgs. A total of 218 cubic yards of soil was removed from this property, backfilled with clean soil, and seeded for grass on the surface.

- **CV0559 – 3344 34th Street North**

The property is approximately 5,326 ft² in size and located at coordinates 33.557019°N and -86.798608°W. A single-story structure occupies the property. It is bordered to the north and south by residential properties, west by a vacant lot, and east by 34th Street North.

Excavation activities began on June 16, 2015 and were completed on June 19, 2015. Based on depth sampling laboratory data, benzo(a)pyrene was the primary compound of concern at this property. Removal activities were conducted on the front (CV0559A) and back yard (CV0559B and CV0559C) to a final depth of 24-inches bgs. A total of 247 cubic yards of soil were removed, backfilled with clean soil, and sodded with grass on the surface.

- **CV0584 – 3136 34th Terrace North**

The property is approximately 5,820 ft² in size and located at coordinates 33.5603109889°N and - 86.8036598717°W. A single-story structure occupies the property which is bordered to the east and west by residential properties, north by 35th Avenue, and south by 34th Terrace North.

Excavation activities began and were completed on March 25, 2015. Based on the depth sampling laboratory data, benzo(a)pyrene was the primary compound of concern at this property. Removal activities were conducted on the front yard (CV0584A) to a final depth of 6-inches bgs. A total of 20 cubic yards of soil was removed, backfilled with clean soil, and sodded with grass on the surface.

- **CV0724 – 3933 Huntsville Road**

The property is approximately 5,260 ft² in size and located at coordinates 33.5616935425°N and - 86.7983430858°W. A single-story structure occupies the property. It is bordered to the east by 35th Avenue North, north and west by F L Shuttlesworth Drive, and south by a residential property.

Excavation activities began on June 22, 2015 and were completed on June 24, 2015. Removal activities were conducted on the front (CV0724A), back yard (CV0724B), and side yard (HP0332A) to a final depth of 6-inches bgs. Based on depth sampling laboratory data, benzo(a)pyrene was the primary compound of concern at this property. A total of 104 cubic yards were removed, backfilled with clean soil, and sodded with grass on the surface.

- **CV0748 – 3031 29th Avenue North**

The property is approximately 820,126 ft² in size and located at coordinates 33.553966°N and -86.805971°W. The property is occupied by the Birmingham Housing Authority's Collegeville Community Center. The property is bordered to the north and west by Housing Authority complexes, east by F L Shuttlesworth Drive, and south by 28th Avenue North.

An XRF was used to screen property. Readings #5-32 were taken around both walkway areas. XRF results are shown below.

Reading #	Lead Result (ppm)	Arsenic Result (ppm)
Blank	5 ± 3	<LOD

Reading #	Lead Result (ppm)	Arsenic Result (ppm)
RCRA	474 ± 17	436 ± 16
5	85 ± 7	<LOD ± 8
6	115 ± 10	19 ± 8
8	382 ± 14	19 ± 8
9	136 ± 24	<LOD ± 28
10	<LOD ± 25	<LOD ± 21
11	52 ± 21	<LOD ± 28
12	95 ± 28	<LOD ± 33
13	153 ± 53	<LOD ± 64
14	98 ± 41	<LOD ± 46
15	18 ± 12	<LOD ± 20
16	612 ± 94	<LOD ± 103
17	200 ± 63	<LOD ± 69
24	29 ± 4	20 ± 4
25	70 ± 6	14 ± 5
26	109 ± 7	13 ± 6
27	75 ± 7	11 ± 6
28	121 ± 8	9 ± 6
29	126 ± 8	13 ± 6
30	124 ± 8	14 ± 6
31	87 ± 7	15 ± 5
32	65 ± 5	10 ± 5

Notes:

ppm – parts per million

<LOD – less than the XRF limit of detection

Excavation activities began and were completed on July 20, 2015. Based on XRF data, lead was the primary compound of concern at this property. Removal activities were conducted on the front yard (CV0748WW) to a final depth of 24-inches bgs. A total of 19 cubic yards were removed, backfilled with clean soil, and sodded with grass on the surface.

- **CV0793 – 3232 30th Court North**

The property is approximately 5,659 ft² in size and located at coordinates 33.55393°N and -86.800819°W. A single-story structure occupies this property. The property is bordered to the north and west by vacant lots, east by 33rd Street North and south by 30th Court North.

Excavation activities began on April 28, 2015 and were completed on May 1, 2015. Based on the depth sampling laboratory data, benzo(a)pyrene and lead were the primary compounds of concern at this property. Removal activities were conducted on the backyard (CV0793B) to a final depth of 12-inches bgs. A total of 139 cubic yards of soil was removed from the property, backfilled with clean soil, and seeded on the surface for grass.

- **CV0823 – 3410 31st Avenue North**

The property is approximately 6,240 ft² in size and located at coordinates 33.553776°N and -86.797676°W. A single-story structure occupies the property. It is bordered to the east and west by residential properties, north by Bethlehem Baptist Church, and south by 31st Avenue North.

Excavation activities began on May 15, 2015 and were completed on May 18, 2015. Based on depth sampling laboratory data, arsenic and lead were the primary compounds of concern. Removal activities were conducted on the front yard (CV0823A) to a final depth of 6-inches bgs and the back yard (CV0823B) to a depth of 12-inches bgs. A total of 154 cubic yards was removed from the entire property, backfilled with clean soil, and seeded for grass on the surface.

- **CV0912 – 3117 34th Avenue North**

The property is approximately 23,617 ft² in size and located at coordinates 33.5542964706°N and -86.7982493356°W. Bethlehem Baptist Church occupies the west side of the property with an asphalt parking lot located on the east side of the property. The property is bordered to the east by residential properties, to the north by 32nd Avenue North, to the west by 34th Street North, and to the south by 31st Alley North.

Excavation activities began on April 7, 2015 and were completed the same day. Based on depth sampling laboratory data, benzo(a)pyrene was the primary compound of concern. Removal activities were conducted on the northern half of the west-facing side of the property (CV0912A) to a final depth of 6-inches bgs. A total of 58 cubic yards of soil was removed, backfilled with clean soil, and sodded with grass on the surface.

- **CV1114 – 3436 27th Court North**

The property is approximately 5,804 ft² in size and located at coordinates 33.5503713863°N and -86.79665004°W. A single-story structure occupies the property that is bordered to the north, east, and west by residential properties; and south by 27th Court North.

Excavation activities began and were completed on April 29, 2015. Based on the depth sampling laboratory data, benzo(a)pyrene was the primary compound of concern of concern at this property. Removal activities were conducted on the front yard (CV1114A) to a final depth of 6-inches bgs. A total of 12 cubic yards of soil was removed, backfilled with clean soil, and sodded on the surface with grass.

- **CV1264 – 3439 29th Avenue North**

The property is approximately 5,598 ft² in size and located at coordinates 33.551684°N and -86.796469°W. A single-story structure occupies the property. The property is bordered to the west and south by residential properties, east by a vacant property, and north by 29th Avenue North.

Excavation activities began on March 24, 2015 and were completed on March 25, 2015. Based on the depth sampling laboratory data, benzo(a)pyrene was the primary compound of concern at this property. Removal activities were conducted on the back yard (CV1264B) to a final depth of 6-inches bgs. A total of 45 cubic yards of soil was removed, backfilled with clean soil, and sodded with grass on the surface.

- **CV1290 – 3437 30th Avenue North**

The property is approximately 6,072 ft² in size and located at coordinates 33.55235194 °N and -86.79665003°W. A single-story structure occupies the property. The property is bordered to the west and south by residential properties, east by a vacant lot, and south by 30th Avenue North.

Excavation activities began on June 11, 2015 and were completed on June 16, 2015. Based on depth sampling laboratory data, benzo(a)pyrene was the primary compound of concern at this property. Removal activities were conducted on the front yard (CV1290A) to a final depth of 18-inches bgs. A total of 183 cubic yards of soil was removed and backfilled with clean soil.

4.2 FAIRMONT

Listed below are the three (3) Phase 3 properties removed in the Fairmont neighborhood. A description of the activities conducted is presented for each parcel removed.

- **FM0047 – 4005 29th Street North**

The property is approximately 7,209 ft² in size and located at coordinates 33.563248766°N and -86.8114022517°W. A single-story structure occupies this property. It is bordered to the north by a residential property, west by 29th Street North, and south and east by vacant lots.

Excavation activities began on June 24, 2015 and were completed on June 26, 2015. Based on depth sampling laboratory data, benzo(a)pyrene was the primary compound of concern at this property. Removal activities were completed on the front (FM0047A) and south side yards (FM0047E) to a final depth of 18-inches bgs; and on the backyard (FM0047B) to a final depth of 24-inches bgs. A total of 103 cubic yards of soil was removed from the property. The entire property was backfilled with clean soil and sodded with grass on the surface.

- **FM0215 – 3142 46th Avenue North**

The property is approximately 6,993 ft² in size and located at coordinates 33.571466°N and -86.805161°W. A two-story structure occupies the property. The property is bordered to the east by a residential property, north by a vacant lot, west by 31st Place North, and south by 46th Avenue North.

Excavation activities began on May 6, 2015 and were completed on May 8, 2015. Based on the depth sampling laboratory data, benzo(a)pyrene was the primary compound of concern at this property. Removal activities were conducted on the back yard (FM0215B) to a final depth of 6-inches bgs. A total of 55 cubic yards of soil were removed, backfilled with clean soil, and sodded with grass on the surface.

- **FM0227 – 3158 46th Avenue North**

The property is approximately 11,428 ft² in size and located at coordinates 33.571355°N and -86.804376°W. A single-story structure occupies the property. The property is bordered to the east by a residential property, north and west by wooded lots, and south by 46th Avenue North.

Excavation activities began on June 26, 2015 and were completed on June 29, 2015. Based on depth sampling laboratory data, benzo(a)pyrene was the primary compound of concern at this property. Removal activities were conducted on the western side yard (FM0227C) and a portion of the back yard (FM0227D) to a final depth of 6-inches bgs. A total of 490 cubic yards of soil was removed from the property and backfilled with clean soil.

4.3 HARRIMAN PARK

Listed below are the three (3) Phase 3 properties removed in the Harriman Park neighborhood. A description of the activities conducted is presented for each parcel removed.

- **HP0125 – 3649 42nd Avenue North**

The property is approximately 6,266 ft² in size and located at coordinates 33.564687°N and -86.792095°W. A single-story structure occupies the property. It is bordered to the east and west by residential properties, south by a vacant lot, and north by 42nd Avenue North.

Excavation activities began and were completed on June 2, 2015. Based on depth sampling laboratory data, benzo(a)pyrene was the primary compound of concern at this property. Removal activities were conducted on the front yard (HP0125A) to a final depth of 6-inches bgs. A total of 31 cubic yards of soil was removed, backfilled with clean soil, and sodded on the surface for grass.

- **HP0205 – 3708 43rd Avenue North**

The property is approximately 10,957 ft² in size and located at coordinates 33.5657947631°N and - 86.7903162687°W. The property is a vacant lot that is bordered to the north, west, and east by residential properties; and to the south by 43rd Avenue North.

Excavation activities began on March 12th, 2015 and were completed on March 13th, 2015. Based on depth sampling laboratory data, benzo(a)pyrene was the primary compound of concern at this property. Removal activities were conducted on the south side of the property (HP0205A) to a final depth of 6-inches bgs. A total of 80 cubic yards of soil was removed from this property, backfilled with clean soil, and sodded on the surface for grass.

- **HP0332 – 3933 Huntsville Road**

The property is approximately 5,389 ft² in size and located at coordinates 33.5616935425°N and - 86.7983430858°W. The property is occupied by a one story structure. The property is bordered to the north and west by F L Shuttlesworth, south by 34th Terrace North, and east by New Progress Baptist Church.

Excavation activities began on June 22, 2015 and were completed on June 24, 2015. This property is part of CV0724. Based on depth sampling laboratory data, benzo(a)pyrene was the primary compound of concern at this property. Removal activities were conducted on the side yard (HP0332A), the front yard (CV0724A) and backyard (CV0724B) to a final depth of 6-inches bgs. A total of 104 cubic yards of soil was removed from this property, backfilled with clean soil, and sodded with grass on the surface.

5.0 AIR MONITORING RESULTS

The field air monitoring activities were conducted by START from March 2015 through July 2015. Air monitoring and air sampling activities were conducted in accordance with the Air Monitoring Work Plan prepared and submitted to the USEPA in April 2014 (Ref. 1).

Action levels for removal activities were selected based on existing health and safety standards. The real-time monitoring action level selected for $PM_{2.5}$ is $150 \mu\text{g}/\text{m}^3$ and is based on the NAAQS provided in Title 40 of the CFR Part 50. The NAAQS for $PM_{2.5}$ is averaged over a 24-hour time period. The $PM_{2.5}$ action level for the site is set at $150 \mu\text{g}/\text{m}^3$ averaged over a one-hour time period.

Action Levels selected for use with the supplemental confirmatory sampling for lead was based on the NAAQS, arsenic based on the ambient air value set forth by the Occupational Safety and Health Agency (OSHA), and PAH based on the values determined by NIOSH. The action level for lead is $0.15 \mu\text{g}/\text{m}^3$ averaged over a sampling period (work day) and is measured as elemental lead with a maximum arithmetic mean averaged over a calendar quarter. The action level for arsenic is $10.0 \mu\text{g}/\text{m}^3$ over a sampling period (work day), and the action level for PAHs (overall) within a sampling period (work day) is $100 \mu\text{g}/\text{m}^3$.

All excavated soils were staged at the Former Carver High School prior to disposal. Air monitoring units (dustraks and datarams) with data logging capabilities were deployed during operational hours and placed in the upwind and downwind locations when the stockpile was uncovered. A review of the downwind data indicated that readings ranged from $0.2 \mu\text{g}/\text{m}^3$ to $85.6 \mu\text{g}/\text{m}^3$ and did not exceed the action levels over the duration of the Phase 3 removal activities. Confirmation air samples were also collected periodically for laboratory analysis during operations. The laboratory data did not indicate detectable arsenic/lead or PAH concentrations above the action levels. A summary of the staging area air monitoring and confirmation air sampling data is presented on Table 2 in Appendix B. The air sampling laboratory reports is presented in Appendix F.

Air monitoring was also conducted while soils were removed from the Phase 3 properties. The instruments were placed at upwind and downwind locations. The real-time air monitoring data downloaded from the instruments indicated airborne particulates did not exceed the action levels established for the site. A review of the data indicated that readings ranged from $0.1 \mu\text{g}/\text{m}^3$ to $37.1 \mu\text{g}/\text{m}^3$ over the duration of the excavation activities. Confirmation air samples were collected for laboratory analysis and the laboratory data did not indicate detectable arsenic/lead or PAH concentrations above the action levels. A summary of the removal properties air monitoring and confirmation air sampling data is presented on Table 3 in Appendix B. The air sampling laboratory reports is presented in Appendix F.

6.0 SUMMARY AND CONCLUSIONS

The Phase 3 removal activities comprised thirty-four (34) properties that exhibited contaminant concentrations PAH and/or arsenic in the surficial soils exceeding approximately 2 times the 10^{-4} and/or HQ=1 risk levels for direct contact with residential soil (1.5 mg/kg for PAH, 61 mg/kg for arsenic) and/or lead in surficial soils exceeding 400 mg/kg. This phase of removal activities were conducted by START from March 2015 through July 2015.

The USEPA ERRS conducted the actual removal of contaminated soils at the 34 impacted properties. It was determined during the investigative phase the depth at which impacted soils was present at each individual parcel. Soils were excavated down to the pre-determined depths. However, when contamination was observed at depths less than or greater than the pre-determined depth not to exceed 24 inches, it was removed at the discretion of the OSC. There may be some discrete locations beyond the excavation effort that exceed the cleanup goals used for shallow soil. However, based on the depth of these detections and the cleanup goals in the removal action, the action taken by EPA is protective for human exposures to surface soils.

START assisted ERRS with outlining property boundaries and screening soils with the XRF, when necessary; collecting soil confirmation samples for laboratory analysis at the discretion of the OSC; monitoring air quality using real-time air monitoring equipment and laboratory air samples; and documenting removal activities with written logbook notes and photographs.

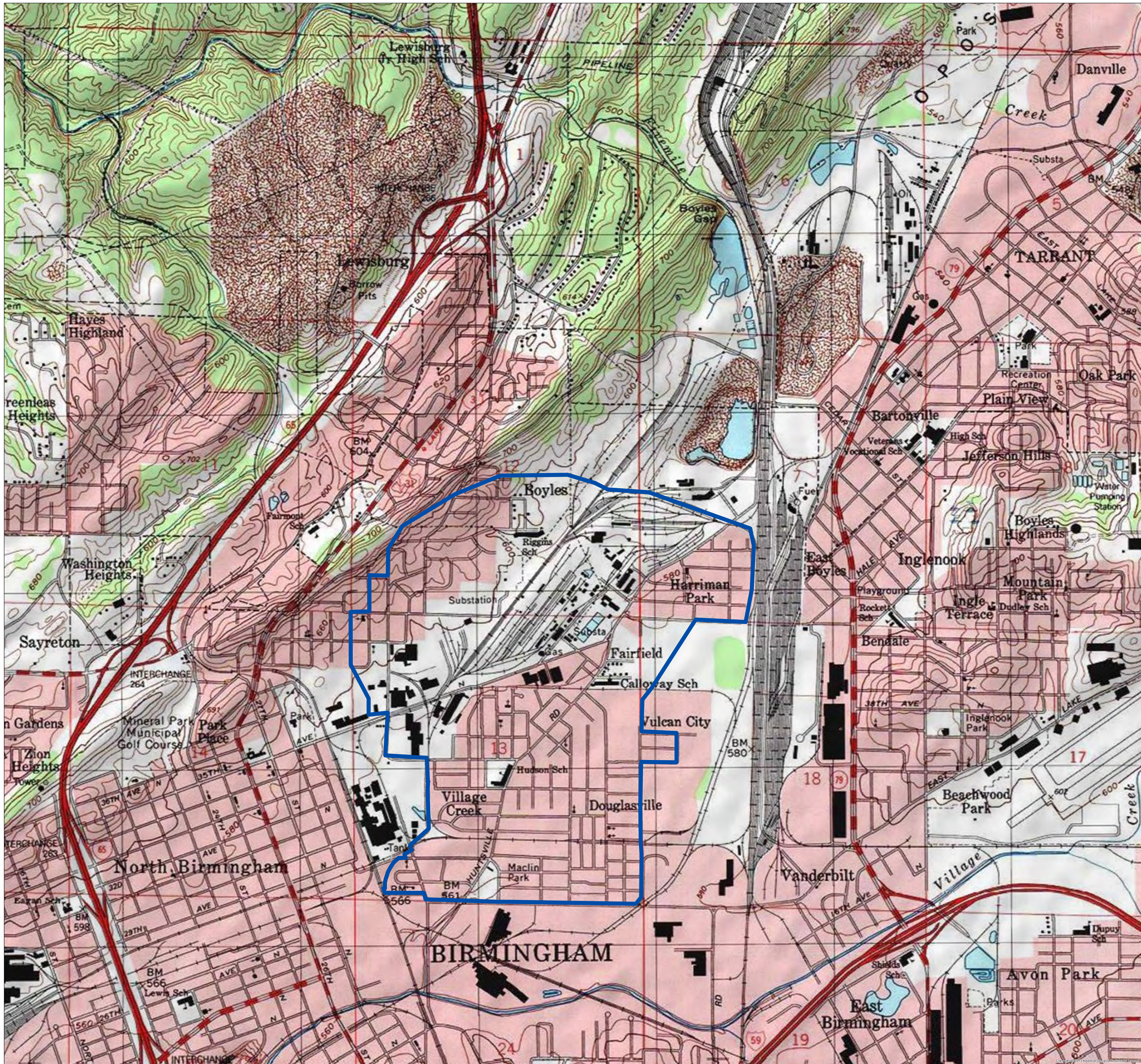
Air monitoring at each excavated property consisted of implementing air monitoring procedures as approved in the Air Monitoring Work Plan and documenting site activities. A review of the real-time air monitoring data for particulates ($PM_{2.5}$) did not indicate an exceedance of the action levels over the duration of the Phase 3 removal activities. Additionally, a review of the air sampling analytical results did not indicate detectable arsenic/lead or PAH concentrations above the action levels.

7.0 REFERENCES

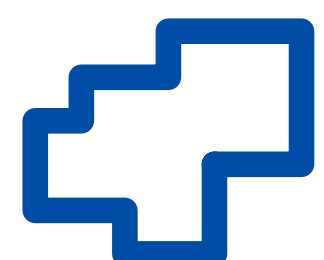
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9. CH2MHill. Technical Memorandum – Prepared for Walter Coke, Inc., Birmingham, Alabama. Voluntary Cleanup Procedures for Riggins School (Fairmont) & Hudson School (Collegeville). January 13, 2011
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12. Walter Coke Energy, Inc. Residential Soil Remedial Action Work Plan Progress Report #2. August 19, 2011.
13. Action Memorandum. Request for a Time-Critical Removal Action at 35th Avenue Site, Birmingham, AL. From: Richard L. Jardine, On Scene Coordinator, EPA Emergency Response and Removal Branch (ERRB). To: Franklin E. Hill, Director, EPA Superfund Division. September 25, 2013
14. Action Memorandum. Amended Scope for the Time-Critical Removal Action at 35th Avenue Site, Birmingham, AL. From: Richard L. Jardine, On Scene Coordinator, EPA ERRB. To: Franklin E. Hill, Director, EPA Superfund Division. March 12, 2014.
15. OTIE. Phase 3 Removal Depth Sampling Report, Revision 1. 35th Avenue Superfund Site. February 17, 2017.
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APPENDIX A

FIGURES

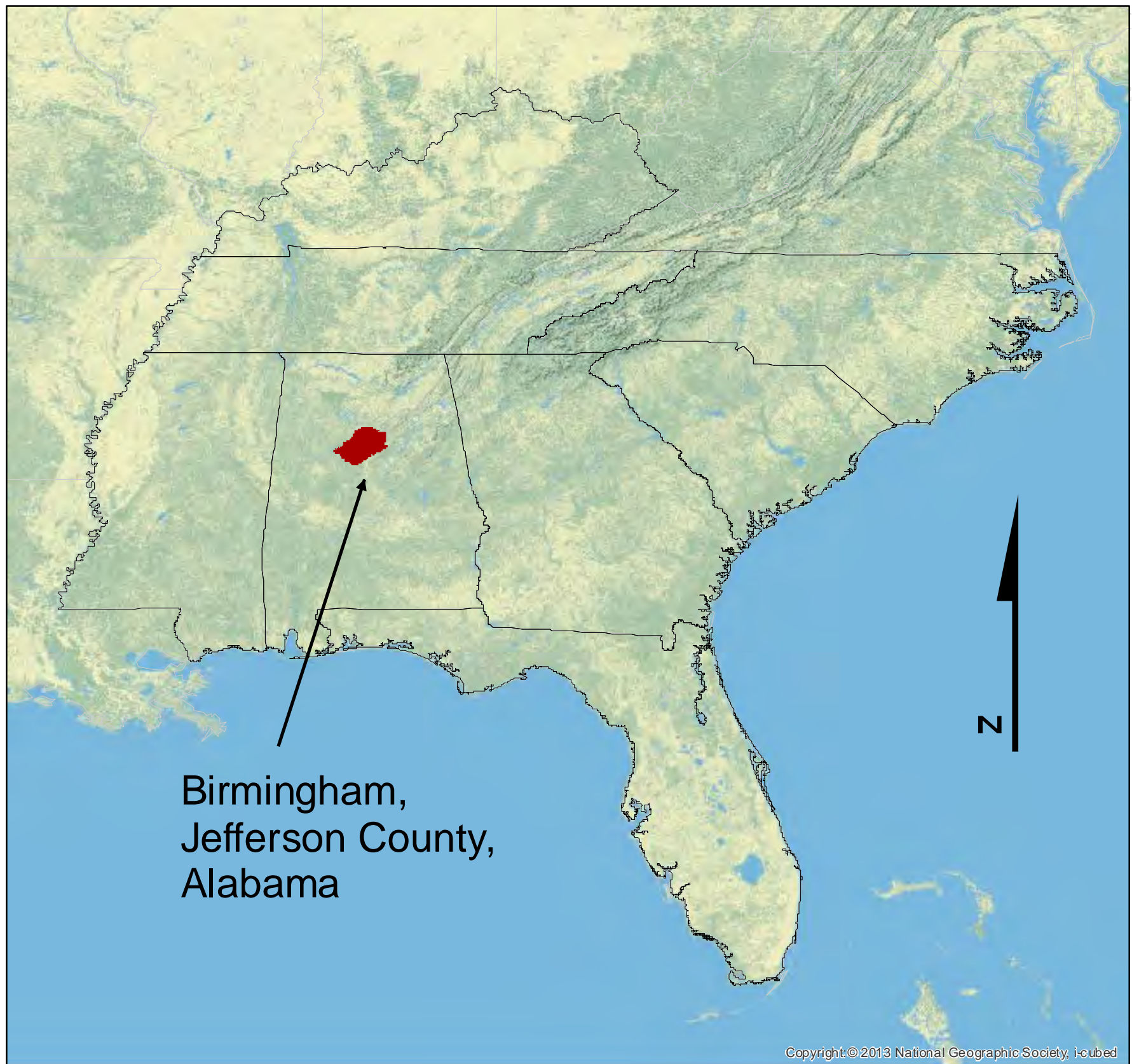
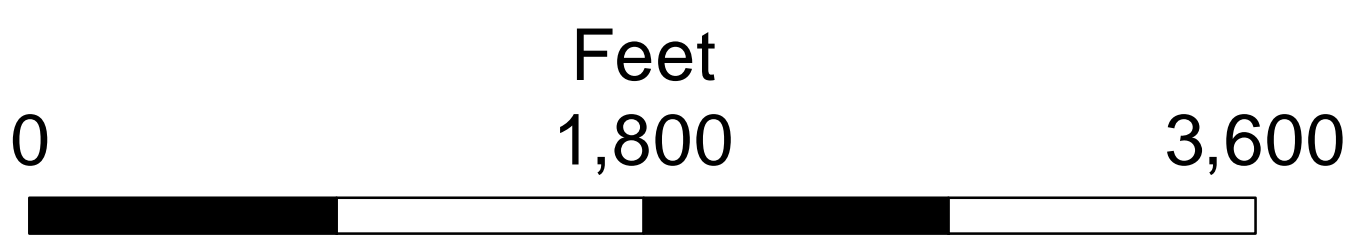


Legend



Study Area

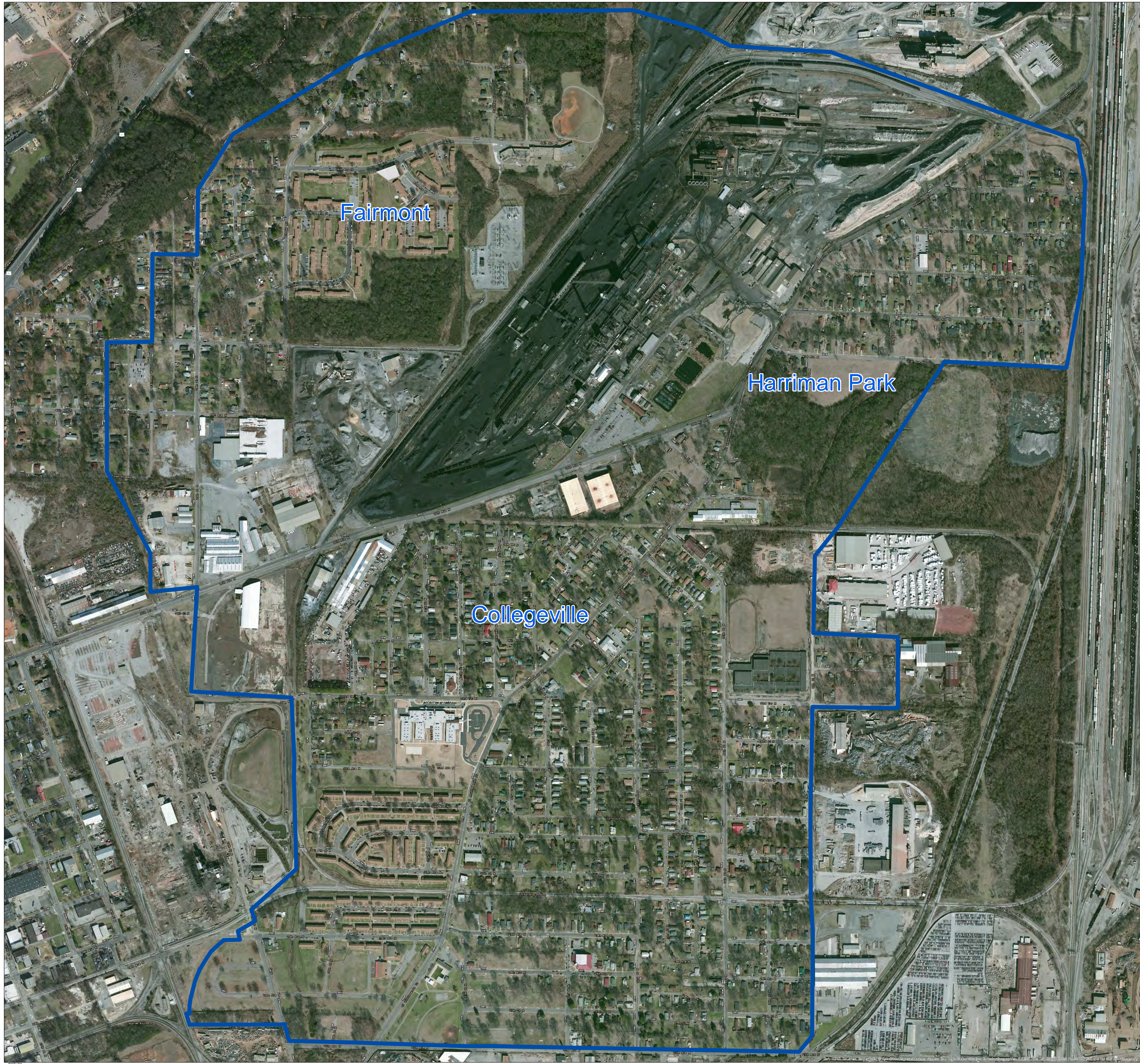
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Quad Birmingham North Date published: 1978.
Quad ID: 33086-E7



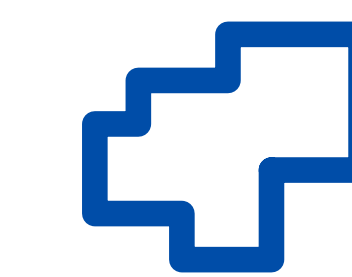
35TH AVENUE SUPERFUND SITE
BIRMINGHAM,
JEFFERSON COUNTY,
ALABAMA
TDD No. 0001/OT-01-001

FIGURE 1
TOPOGRAPHICAL MAP



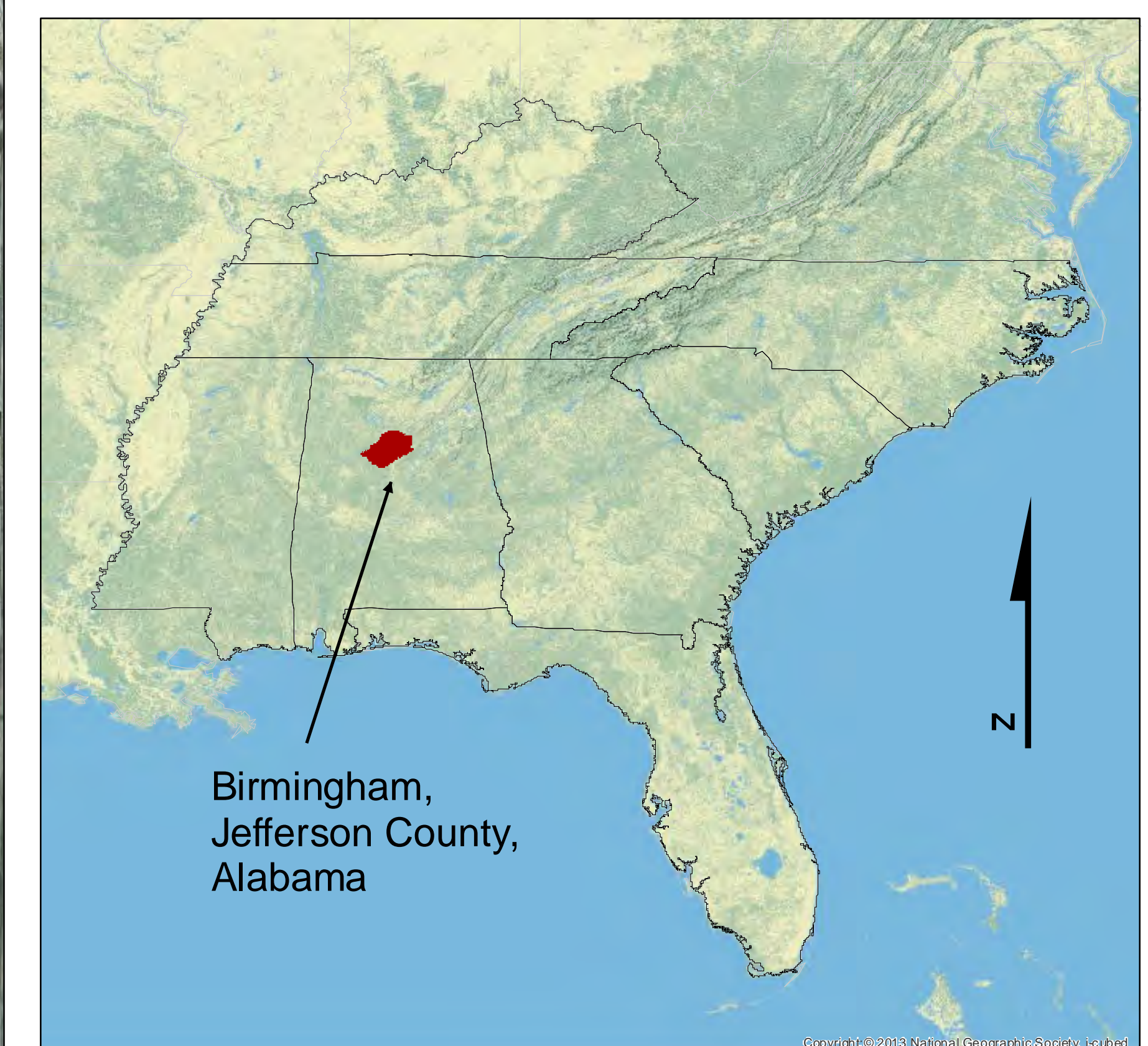


Legend



EPA Study Area

0 700 1,400
Feet



35TH AVENUE, SUPERFUND SITE
BIRMINGHAM,
JEFFERSON COUNTY,
ALABAMA
TDD No. 0001/OT-01-001

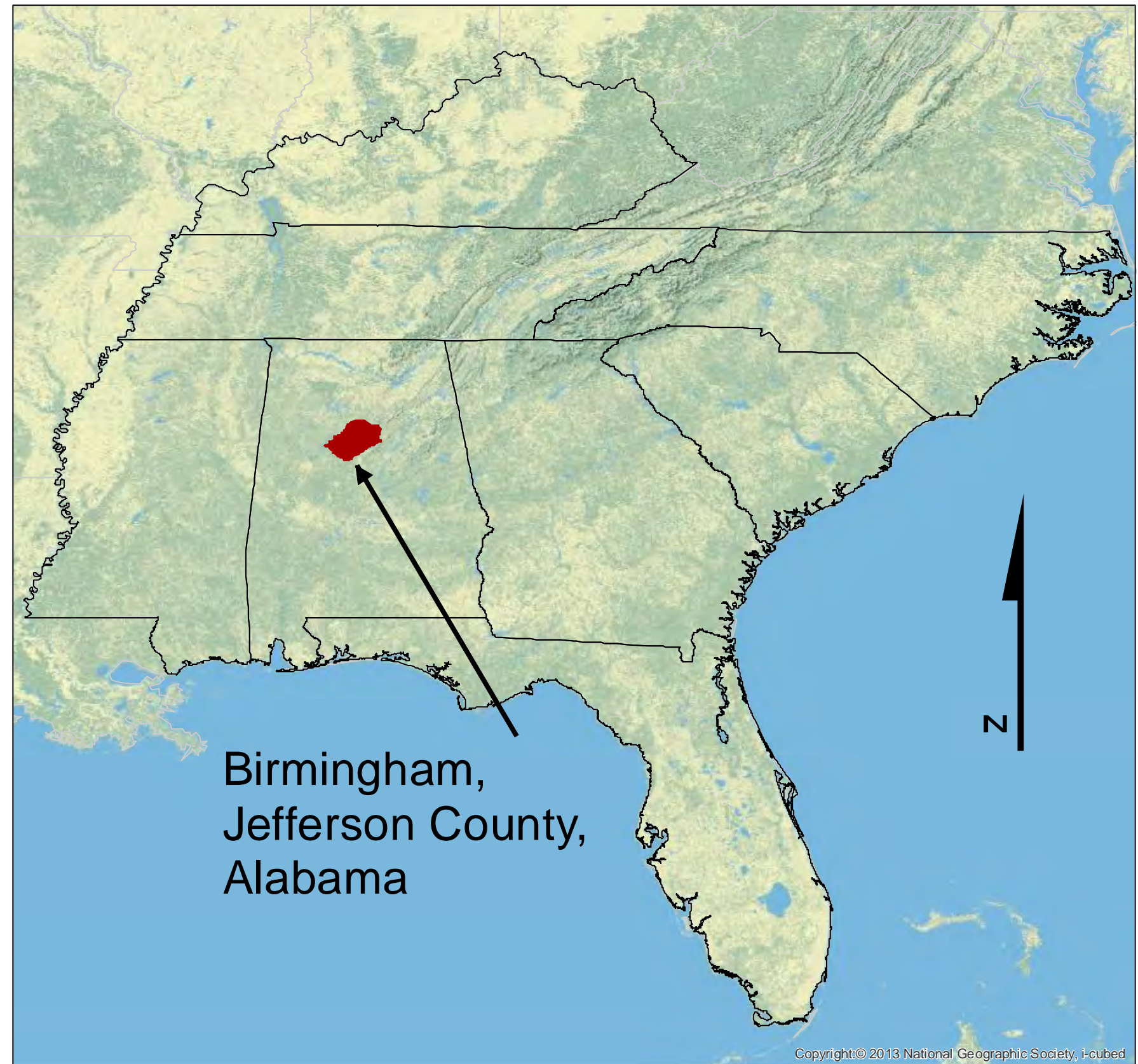
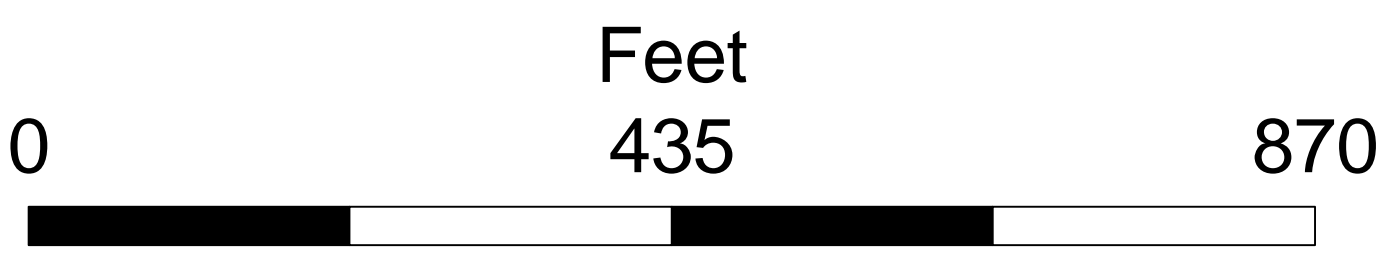
FIGURE 2
STUDY AREA MAP





Legend

Removed Parcel



35TH AVENUE SUPERFUND SITE
BIRMINGHAM
JEFFERSON COUNTY
ALABAMA
TDD NO. 0001 / OT-01-001
PHASE III REMOVAL MAP
COLLEGEVILLE



United States Environmental Protection Agency

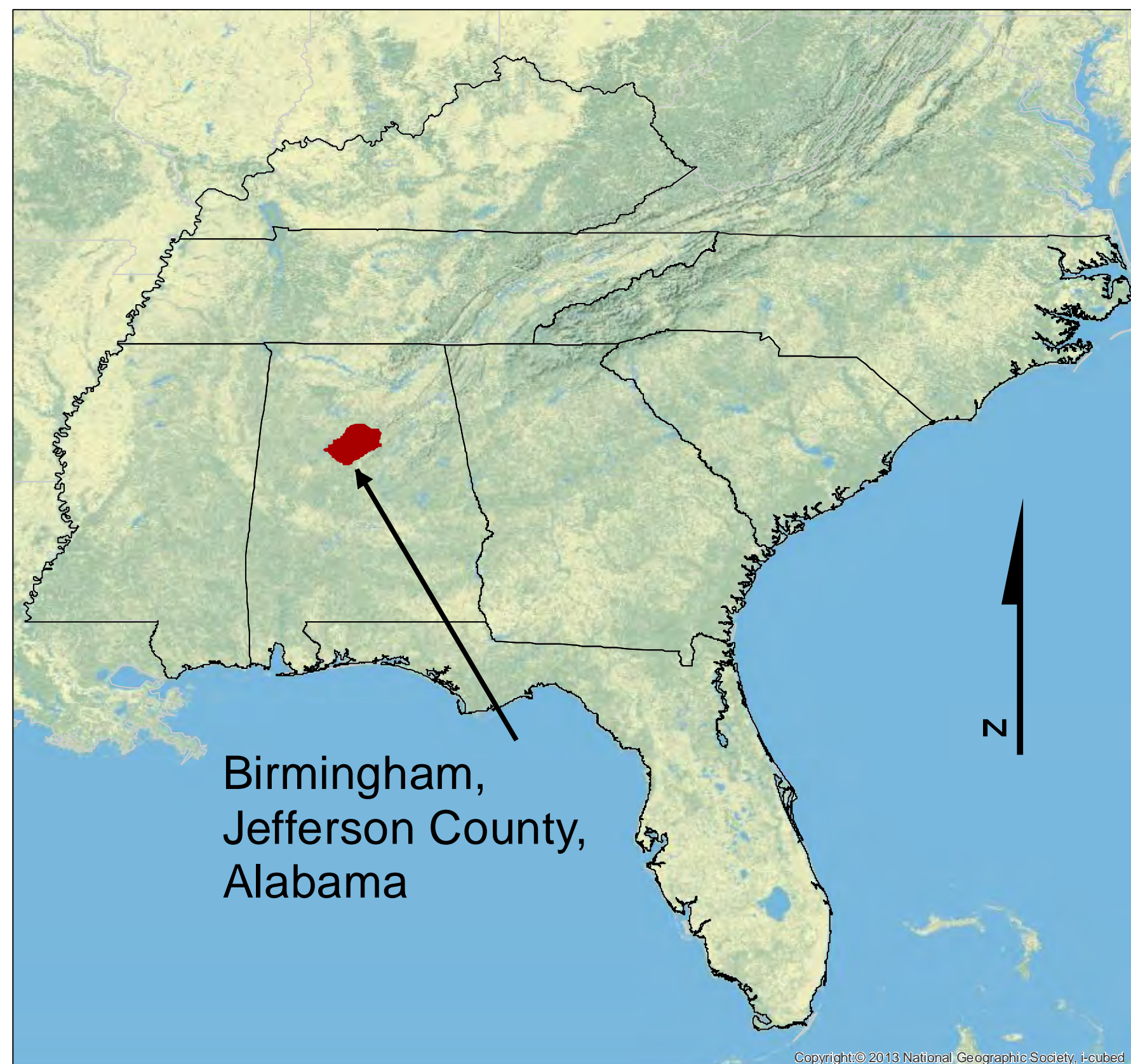




Legend

 Removed Parcel

0 310 620
Feet



35TH AVENUE SUPERFUND SITE
BIRMINGHAM
JEFFERSON COUNTY
ALABAMA
TDD NO. 0001 / OT-01-001
PHASE III REMOVAL MAP
FAIRMONT



United States Environmental Protection Agency





Legend

Removed Parcel

0

Feet

105

210

Birmingham,
Jefferson County,
Alabama

35TH AVENUE SUPERFUND SITE
BIRMINGHAM
JEFFERSON COUNTY
ALABAMA
TDD NO. 0001 / OT-01-001

PHASE III REMOVAL MAP
HARRIMAN PARK

United States Environmental Protection Agency

OTIE
An Oneida Nation Company

Path: E:\GIS Workspace\35Th Ave\35Th Ave Sampling Event\Phase III Removal Maps\Phase III Removal Map - Harriman Park.mxd

APPENDIX B

TABLES

TABLE 1
35TH AVENUE REMOVAL
PHASE III REMOVAL PROPERTIES AND LOCATIONS

Property ID	Address	Location ID	Removal Depth (inches bgs)	Total Volume (Cubic Yards)
CV-0045	3436 30th Way North	CV0045B	6	120.63
CV-0104	3414 31st Place North	CV0104A	6	20.2
		CV0104B	6	37.4
		CV0104C	6	18
CV-0162	3338 31st Way North	CV0162A	6	15.8
CV-0197	3404 32nd Avenue North	CV0197C	18	288.78
CV-0225	3321 32nd Place North	CV0225B	24	347.63
CV-0227	3325 32nd Place North	CV0227A	6	254.29
		CV0227B	24	
CV-0252	3301 32nd Street North	CV0252A	24	89.56
CV-0254	3313 32nd Street North	CV0254A	24	350.81
		CV0254B	12	
CV-0256	3317 32nd Street North	CV0256E	24	64.3
CV-0305	3431 33rd Avenue North	CV0305B	12	131.7
CV-0312	3449 33rd Avenue North	CV0312A	12	151.07
CV-0339	3420 33rd Court North	CV0339B	12	140.04
CV-0341	3428 33rd Court North	CV0341B	6	58.7
CV-0401	3369 33rd Place North	CV0401B	24	222.07
CV-0408	3384 33rd Place North	CV0408A	12	40.78
CV-0500	3021 33rd Terrace North	CV0500A	6	31.48
CV-0503	3035 33rd Terrace North	CV0503A	12	160.7
		CV0503B	12	
CV-0523	3030 34th Avenue North	CV0523A	8	217.78
CV-0559	3344 34th Street North	CV0559A	24	246.96
		CV0559B	12	
		CV0559C	24	
CV-0584	3136 34th Terrace North	CV0584A	6	20.46
CV-0724	3933 Huntsville Road	CV0724A	6	104.15
		CV0724B	6	
CV-0748	HABD	CV0748WW	24	18.96
CV-0793	3232 30th Court North	CV0793B	12	138.96
CV-0823	3410 31st Avenue North	CV0823A	6	153.85
		CV0823B	12	
CV-0912	3117 34th Street North	CV0912A	6	57.93
CV-1114	3436 27th Court North	CV1114A	6	11.85
CV-1264	3439 29th Avenue North	CV1264B	6	45.33
CV-1290	3437 30th Avenue North	CV1290A	18	183.22
FM-0047	4005 29th Street North	FM0047A	18	102.58
		FM0047B	24	
		FM0047E	18	
FM-0215	3142 46th Avenue North	FM0215B	6	55.04
FM-0227	3158 46th Avenue North	FM0227C	6	49.07
		FM0227D	6	
HP-0125	3649 42nd Avenue North	HP0125A	6	30.7

TABLE 1
35TH AVENUE REMOVAL
PHASE III REMOVAL PROPERTIES AND LOCATIONS

Property ID	Address	Location ID	Removal Depth (inches bgs)	Total Volume (Cubic Yards)
HP-0205	3708 43rd Avenue North	HP0205A	6	80
HP-0332	3933 Huntsville Road	HP0332A	6	104.15

Notes:

bgs - below ground surface
CV - Collegeville
FM - Fairmont
HP - Harriman Park
HABD - Housing Authority of Birmingham District

TABLE 2
35TH AVENUE REMOVAL
SUMMARY OF STAGING AREA AIR MONITORING AND CONFIRMATION AIR SAMPLING DATA
(MARCH 2015 - JULY 2015)

DataRAM/Sample ID	Sample Date	Sample Location	Air Volume (L)	DataRam Monitoring		Confirmation Air Sample Laboratory Data					
				Average Reading ($\mu\text{g}/\text{m}^3$)	¹ PM ₁₀ Action Level Exceedance 150 $\mu\text{g}/\text{m}^3$ (Yes or No)	As Result ($\mu\text{g}/\text{m}^3$)	² As Action Level Exceedance 10.0 $\mu\text{g}/\text{m}^3$ (Yes or No)	Pb Result ($\mu\text{g}/\text{m}^3$)	³ Pb Action Level Exceedance 0.15 $\mu\text{g}/\text{m}^3$ (Yes or No)	PAH Result ($\mu\text{g}/\text{m}^3$)	⁴ PAH Action Level Exceedance 100 $\mu\text{g}/\text{m}^3$ (Yes or No)
Data Ram SN D596	03/16/15	Downwind of stockpile	NA	14.4	No	NA	NA	NA	NA	NA	NA
Data Ram SN D879	03/16/15	Upwind of stockpile	NA	11.5	No	NA	NA	NA	NA	NA	NA
Staging-BaP11	03/16/15	Downwind of stockpile	2,400	NA	NA	NA	NA	NA	NA	<0.42	No
Data Ram SN D596	03/18/15	Downwind of stockpile	NA	15.6	No	NA	NA	NA	NA	NA	NA
Data Ram SN D879	03/18/15	Upwind of stockpile	NA	9.4	No	NA	NA	NA	NA	NA	NA
Data Ram SN D596	03/19/15	Downwind of stockpile	NA	71.5	No	NA	NA	NA	NA	NA	NA
Data Ram SN D596	03/24/15	Downwind of stockpile	NA	14.4	No	NA	NA	NA	NA	NA	NA
Data Ram SN D449	03/24/15	Upwind of stockpile	NA	4.3	No	NA	NA	NA	NA	NA	NA
Data Ram SN D596	03/25/15	Downwind of stockpile	NA	13.9	No	NA	NA	NA	NA	NA	NA
Data Ram SN D449	03/25/15	Upwind of stockpile	NA	4.9	No	NA	NA	NA	NA	NA	NA
Data Ram SN D596	05/11/15	Downwind of stockpile	NA	DRM	No	NA	NA	NA	NA	NA	NA
Data Ram SN D449	05/11/15	Upwind of stockpile	NA	DRM	No	NA	NA	NA	NA	NA	NA
Data Ram SN D596	05/12/15	Downwind of stockpile	NA	21.2	No	NA	NA	NA	NA	NA	NA
Data Ram SN D449	05/12/15	Upwind of stockpile	NA	DRM	No	NA	NA	NA	NA	NA	NA
Data Ram SN D596	05/13/15	Downwind of stockpile	NA	10.7	No	NA	NA	NA	NA	NA	NA

TABLE 2
35TH AVENUE REMOVAL
SUMMARY OF STAGING AREA AIR MONITORING AND CONFIRMATION AIR SAMPLING DATA
(MARCH 2015 - JULY 2015)

DataRAM/Sample ID	Sample Date	Sample Location	Air Volume (L)	DataRam Monitoring		Confirmation Air Sample Laboratory Data					
				Average Reading ($\mu\text{g}/\text{m}^3$)	¹ PM ₁₀ Action Level Exceedance 150 $\mu\text{g}/\text{m}^3$ (Yes or No)	As Result ($\mu\text{g}/\text{m}^3$)	² As Action Level Exceedance 10.0 $\mu\text{g}/\text{m}^3$ (Yes or No)	Pb Result ($\mu\text{g}/\text{m}^3$)	³ Pb Action Level Exceedance 0.15 $\mu\text{g}/\text{m}^3$ (Yes or No)	PAH Result ($\mu\text{g}/\text{m}^3$)	⁴ PAH Action Level Exceedance 100 $\mu\text{g}/\text{m}^3$ (Yes or No)
Data Ram SN D449	05/13/15	Upwind of stockpile	NA	2.6	No	NA	NA	NA	NA	NA	NA
Data Ram SN D596	05/14/15	Downwind of stockpile	NA	14.7	No	NA	NA	NA	NA	NA	NA
Data Ram SN D449	05/14/15	Upwind of stockpile	NA	10.2	No	NA	NA	NA	NA	NA	NA
Data Ram SN D596	05/19/15	Downwind of stockpile	NA	7.7	No	NA	NA	NA	NA	NA	NA
Data Ram SN D596	05/20/15	Downwind of stockpile	NA	16.8	No	NA	NA	NA	NA	NA	NA
Data Ram SN D449	05/19/15	Upwind of stockpile	NA	7.0	No	NA	NA	NA	NA	NA	NA
Staging-BaP12	05/19/15	Downwind of stockpile	2,400	NA	NA	NA	NA	NA	NA	<0.42	No
Data Ram SN D449	05/20/15	Upwind of stockpile	NA	7.2	No	NA	NA	NA	NA	NA	NA
Data Ram SN D596	06/01/15	Downwind of stockpile	NA	9.3	No	NA	NA	NA	NA	NA	NA
Data Ram SN D449	06/01/15	Upwind of stockpile	NA	30.3	No	NA	NA	NA	NA	NA	NA
Data Ram SN D596	06/02/15	Downwind of stockpile	NA	19.3	No	NA	NA	NA	NA	NA	NA
Data Ram SN D449	06/02/15	Upwind of stockpile	NA	9.3	No	NA	NA	NA	NA	NA	NA
Data Ram SN D596	06/03/15	Downwind of stockpile	NA	20.8	No	NA	NA	NA	NA	NA	NA
Data Ram SN D449	06/03/15	Upwind of stockpile	NA	0.2	No	NA	NA	NA	NA	NA	NA

TABLE 2
35TH AVENUE REMOVAL
SUMMARY OF STAGING AREA AIR MONITORING AND CONFIRMATION AIR SAMPLING DATA
(MARCH 2015 - JULY 2015)

DataRAM/Sample ID	Sample Date	Sample Location	Air Volume (L)	DataRam Monitoring		Confirmation Air Sample Laboratory Data					
				Average Reading ($\mu\text{g}/\text{m}^3$)	¹ PM ₁₀ Action Level Exceedance 150 $\mu\text{g}/\text{m}^3$ (Yes or No)	As Result ($\mu\text{g}/\text{m}^3$)	² As Action Level Exceedance 10.0 $\mu\text{g}/\text{m}^3$ (Yes or No)	Pb Result ($\mu\text{g}/\text{m}^3$)	³ Pb Action Level Exceedance 0.15 $\mu\text{g}/\text{m}^3$ (Yes or No)	PAH Result ($\mu\text{g}/\text{m}^3$)	⁴ PAH Action Level Exceedance 100 $\mu\text{g}/\text{m}^3$ (Yes or No)
Data Ram SN D596	06/04/15	Downwind of stockpile	NA	16.0	No	NA	NA	NA	NA	NA	NA
Data Ram SN D449	06/05/15	Downwind of stockpile	NA	21.2	No	NA	NA	NA	NA	NA	NA
Data Ram SN D596	06/08/15	Downwind of stockpile	NA	23.3	No	NA	NA	NA	NA	NA	NA
Data Ram SN D742	06/08/15	Upwind of stockpile	NA	18.0	No	NA	NA	NA	NA	NA	NA
Data Ram SN D596	06/09/15	Downwind of stockpile	NA	28.5	No	NA	NA	NA	NA	NA	NA
Data Ram SN D742	06/09/15	Upwind of stockpile	NA	25.7	No	NA	NA	NA	NA	NA	NA
Data Ram SN D596	06/10/15	Downwind of stockpile	NA	33.6	No	NA	NA	NA	NA	NA	NA
Data Ram SN D742	06/10/15	Upwind of stockpile	NA	30.2	No	NA	NA	NA	NA	NA	NA
Data Ram SN D596	06/15/15	Downwind of stockpile	NA	29.4	No	NA	NA	NA	NA	NA	NA
Data Ram SN D742	06/15/15	Upwind of stockpile	NA	32.3	No	NA	NA	NA	NA	NA	NA
Staging-BaP13	06/16/15	Downwind of stockpile	2,400	NA	NA	NA	NA	NA	NA	<0.42	No
Data Ram SN D742	06/16/15	Upwind of stockpile	NA	22.6	No	NA	NA	NA	NA	NA	NA
Data Ram SN D596	06/17/15	Downwind of stockpile	NA	28.2	No	NA	NA	NA	NA	NA	NA
Data Ram SN D742	06/17/15	Upwind of stockpile	NA	21.4	No	NA	NA	NA	NA	NA	NA

TABLE 2
35TH AVENUE REMOVAL
SUMMARY OF STAGING AREA AIR MONITORING AND CONFIRMATION AIR SAMPLING DATA
(MARCH 2015 - JULY 2015)

DataRAM/Sample ID	Sample Date	Sample Location	Air Volume (L)	DataRam Monitoring		Confirmation Air Sample Laboratory Data					
				Average Reading ($\mu\text{g}/\text{m}^3$)	¹ PM ₁₀ Action Level Exceedance 150 $\mu\text{g}/\text{m}^3$ (Yes or No)	As Result ($\mu\text{g}/\text{m}^3$)	² As Action Level Exceedance 10.0 $\mu\text{g}/\text{m}^3$ (Yes or No)	Pb Result ($\mu\text{g}/\text{m}^3$)	³ Pb Action Level Exceedance 0.15 $\mu\text{g}/\text{m}^3$ (Yes or No)	PAH Result ($\mu\text{g}/\text{m}^3$)	⁴ PAH Action Level Exceedance 100 $\mu\text{g}/\text{m}^3$ (Yes or No)
Data Ram SN D596	06/18/15	Downwind of stockpile	NA	26.1	No	NA	NA	NA	NA	NA	NA
Data Ram SN D742	06/18/15	Upwind of stockpile	NA	18.6	No	NA	NA	NA	NA	NA	NA
Data Ram SN D596	06/19/15	Downwind of stockpile	NA	17.7	No	NA	NA	NA	NA	NA	NA
Data Ram SN D742	06/19/15	Upwind of stockpile	NA	12.8	No	NA	NA	NA	NA	NA	NA
Data Ram SN D596	06/22/15	Downwind of stockpile	NA	28.1	No	NA	NA	NA	NA	NA	NA
Data Ram SN D742	06/22/15	Upwind of stockpile	NA	DRM	No	NA	NA	NA	NA	NA	NA
Data Ram SN D596	06/23/15	Downwind of stockpile	NA	61.5	No	NA	NA	NA	NA	NA	NA
Data Ram SN D742	06/23/15	Upwind of stockpile	NA	DRM	No	NA	NA	NA	NA	NA	NA
Data Ram SN D596	06/24/15	Downwind of stockpile	NA	18.9	No	NA	NA	NA	NA	NA	NA
Data Ram SN D742	06/24/15	Upwind of stockpile	NA	15.4	No	NA	NA	NA	NA	NA	NA
Data Ram SN D596	06/25/15	Downwind of stockpile	NA	29.7	No	NA	NA	NA	NA	NA	NA
Data Ram SN D742	06/25/15	Upwind of stockpile	NA	DRM	No	NA	NA	NA	NA	NA	NA
Data Ram SN D711	07/13/15	Upwind of stockpile	NA	10.9	No	NA	NA	NA	NA	NA	NA
Data Ram SN D741	07/14/15	Downwind of stockpile	NA	19.3	No	NA	NA	NA	NA	NA	NA

TABLE 2
35TH AVENUE REMOVAL
SUMMARY OF STAGING AREA AIR MONITORING AND CONFIRMATION AIR SAMPLING DATA
(MARCH 2015 - JULY 2015)

DataRAM/Sample ID	Sample Date	Sample Location	Air Volume (L)	DataRam Monitoring		Confirmation Air Sample Laboratory Data					
				Average Reading ($\mu\text{g}/\text{m}^3$)	¹ PM ₁₀ Action Level Exceedance 150 $\mu\text{g}/\text{m}^3$ (Yes or No)	As Result ($\mu\text{g}/\text{m}^3$)	² As Action Level Exceedance 10.0 $\mu\text{g}/\text{m}^3$ (Yes or No)	Pb Result ($\mu\text{g}/\text{m}^3$)	³ Pb Action Level Exceedance 0.15 $\mu\text{g}/\text{m}^3$ (Yes or No)	PAH Result ($\mu\text{g}/\text{m}^3$)	⁴ PAH Action Level Exceedance 100 $\mu\text{g}/\text{m}^3$ (Yes or No)
Data Ram SN D741	07/15/15	Downwind of stockpile	NA	25.1	No	NA	NA	NA	NA	NA	NA
Data Ram SN D061	07/15/15	Upwind of stockpile	NA	46.8	No	NA	NA	NA	NA	NA	NA
Data Ram SN D741	07/16/15	Downwind of stockpile	NA	18.0	No	NA	NA	NA	NA	NA	NA
Data Ram SN D061	07/16/15	Upwind of stockpile	NA	0.4	No	NA	NA	NA	NA	NA	NA
Data Ram SN D741	07/20/15	Downwind of stockpile	NA	16.9	No	NA	NA	NA	NA	NA	NA
Staging-As26	07/21/15	Downwind of stockpile	1,809	NA	NA	<0.221	No	<0.111	No	NA	NA
Data Ram SN D741	07/21/15	Downwind of stockpile	NA	21.7	No	NA	NA	NA	NA	NA	NA
Data Ram SN D061	07/21/15	Upwind of stockpile	NA	54.8	No	NA	NA	NA	NA	NA	NA
Data Ram SN D741	07/22/15	Downwind of stockpile	NA	23.4	No	NA	NA	NA	NA	NA	NA
Data Ram SN D391	07/22/15	Upwind of stockpile	NA	19.5	No	NA	NA	NA	NA	NA	NA
Data Ram SN D741	07/27/15	Downwind of stockpile	NA	36.5	No	NA	NA	NA	NA	NA	NA
Data Ram SN D061	07/27/15	Upwind of stockpile	NA	85.6	No	NA	NA	NA	NA	NA	NA
Data Ram SN D741	07/28/15	Downwind of stockpile	NA	52.6	No	NA	NA	NA	NA	NA	NA
Data Ram SN D061	07/28/15	Upwind of stockpile	NA	20.6	No	NA	NA	NA	NA	NA	NA

TABLE 2
35TH AVENUE REMOVAL
SUMMARY OF STAGING AREA AIR MONITORING AND CONFIRMATION AIR SAMPLING DATA
(MARCH 2015 - JULY 2015)

Notes:

- | | |
|--|--|
| < - Analyte was not detected above the sample quantitation limit | PAH - Polycyclic aromatic hydrocarbon |
| As - Arsenic | Pb - Lead |
| J - Concentration is estimated | SN - Serial Number |
| L - Liter | $\mu\text{g}/\text{m}^3$ - Micrograms per cubic meter |
| NA - Not Applicable | ¹ - PM ₁₀ Action Level taken from NAAQS. |
| NAAQS - National Ambient Air Quality Standards | ² - As Action Level taken from OSHA. |
| NIOSH - National Institute for Occupational Safety and Health | ³ - Pb Action Level taken from NAAQS. |
| OSHA - Occupational Safety and Health Administration | ⁴ - PAH Action Level taken from NIOSH. |

TABLE 3
35TH AVENUE REMOVAL
SUMMARY OF PROPERTY AIR MONITORING AND CONFIRMATION AIR SAMPLING DATA
(MARCH 2015 - JULY 2015)

Location ID	Sample ID	Sample Date	Sample / DataRam Location	Air Volume (L)	DataRam Monitoring		Confirmation Air Sample Laboratory Data					
					Average Reading ($\mu\text{g}/\text{m}^3$)	¹ PM ₁₀ Action Level Exceedance 150 $\mu\text{g}/\text{m}^3$ (Yes or No)	As Result ($\mu\text{g}/\text{m}^3$)	² As Action Level Exceedance 10.0 $\mu\text{g}/\text{m}^3$ (Yes or No)	Pb Result ($\mu\text{g}/\text{m}^3$)	³ Pb Action Level Exceedance 0.15 $\mu\text{g}/\text{m}^3$ (Yes or No)	PAH Result ($\mu\text{g}/\text{m}^3$)	⁴ PAH Action Level Exceedance 100 $\mu\text{g}/\text{m}^3$ (Yes or No)
CV0254B	DataRam SN D879	06/05/15	Downwind of excavation	NA	13.1	No	NA	NA	NA	NA	NA	NA
CV0254B	DataRam SN D707	06/05/15	Upwind of excavation	NA	8.2	No	NA	NA	NA	NA	NA	NA
CV0254B	DataRam SN D879	06/08/15	Downwind of excavation	NA	12.3	No	NA	NA	NA	NA	NA	NA
CV0254B	DataRam SN D707	06/08/15	Upwind of excavation	NA	11.8	No	NA	NA	NA	NA	NA	NA
CV0305B	Dataram SN D879	05/04/15	Downwind of excavation	NA	9.3	No	NA	NA	NA	NA	NA	NA
CV0305B	Dataram SN D707	05/04/15	Upwind of excavation	NA	17.5	No	NA	NA	NA	NA	NA	NA
CV0305B	Dataram SN D879	05/05/15	Downwind of excavation	NA	11.9	No	NA	NA	NA	NA	NA	NA
CV0305B	Dataram SN D707	05/05/15	Upwind of excavation	NA	10.3	No	NA	NA	NA	NA	NA	NA
CV0312A	Dataram SN D879	04/21/15	Downwind of excavation	NA	6.4	No	NA	NA	NA	NA	NA	NA
CV0312A	Dataram SN D707	04/21/15	Upwind of excavation	NA	15.4	No	NA	NA	NA	NA	NA	NA
CV0339	DataRAM 4 SN D879	07/27/15	Downwind of excavation	NA	27.2	No	NA	NA	NA	NA	NA	NA
CV0339	DataRAM 4 SN D391	07/27/15	Upwind of excavation	NA	28.5	No	NA	NA	NA	NA	NA	NA
CV0401B	DataRam SN D707	06/03/15	Upwind of excavation	NA	21.3	No	NA	NA	NA	NA	NA	NA
CV0401B	DataRam SN D879	06/03/15	Downwind of excavation	NA	12.6	No	NA	NA	NA	NA	NA	NA
CV0500A	DataRam SN D879	04/08/15	Downwind of excavation	NA	32.1	No	NA	NA	NA	NA	NA	NA
CV0500A	DataRam SN D707	04/08/15	Upwind of excavation	NA	26.8	No	NA	NA	NA	NA	NA	NA

TABLE 3
35TH AVENUE REMOVAL
SUMMARY OF PROPERTY AIR MONITORING AND CONFIRMATION AIR SAMPLING DATA
(MARCH 2015 - JULY 2015)

Location ID	Sample ID	Sample Date	Sample / DataRam Location	Air Volume (L)	DataRam Monitoring		Confirmation Air Sample Laboratory Data					
					Average Reading ($\mu\text{g}/\text{m}^3$)	¹ PM ₁₀ Action Level Exceedance 150 $\mu\text{g}/\text{m}^3$ (Yes or No)	As Result ($\mu\text{g}/\text{m}^3$)	² As Action Level Exceedance 10.0 $\mu\text{g}/\text{m}^3$ (Yes or No)	Pb Result ($\mu\text{g}/\text{m}^3$)	³ Pb Action Level Exceedance 0.15 $\mu\text{g}/\text{m}^3$ (Yes or No)	PAH Result ($\mu\text{g}/\text{m}^3$)	⁴ PAH Action Level Exceedance 100 $\mu\text{g}/\text{m}^3$ (Yes or No)
CV0503B	DataRAM 4 SN D879	04/22/15	Downwind of excavation	NA	6.0	No	NA	NA	NA	NA	NA	NA
CV0503B	DataRAM 4 SN D707	04/22/15	Upwind of excavation	NA	6.4	No	NA	NA	NA	NA	NA	NA
CV0503B	DataRAM 4 SN D879	04/23/15	Downwind of excavation	NA	8.8	No	NA	NA	NA	NA	NA	NA
CV0503B	DataRAM 4 SN D707	04/23/15	Upwind of excavation	NA	9.1	No	NA	NA	NA	NA	NA	NA
CV0511A	DataRam SN D879	05/07/15	Downwind of excavation	NA	6.5	No	NA	NA	NA	NA	NA	NA
CV0511A	DataRam SN D707	05/07/15	Upwind of excavation	NA	11.5	No	NA	NA	NA	NA	NA	NA
CV0523A	DataRam SN D879	05/01/15	Downwind of excavation	NA	6.1	No	NA	NA	NA	NA	NA	NA
CV0523A	DataRam SN D707	05/01/15	Upwind of excavation	NA	14.0	No	NA	NA	NA	NA	NA	NA
CV0559A	DataRam SN D879	06/18/15	Downwind of excavation	NA	10.7	No	NA	NA	NA	NA	NA	NA
CV0559A	DataRam SN D879	06/19/15	Downwind of excavation	NA	10.7	No	NA	NA	NA	NA	NA	NA
CV0559B	DataRam SN D879	06/17/15	Downwind of excavation	NA	20.7	No	NA	NA	NA	NA	NA	NA
CV0559B	DataRam SN D879	06/18/15	Downwind of excavation	NA	15.4	No	NA	NA	NA	NA	NA	NA
CV0584A	DataRam SN D602	03/25/15	Downwind of excavation	NA	7.3	No	NA	NA	NA	NA	NA	NA
CV0584A	DataRam SN D759	03/25/15	Upwind of excavation	NA	0.1	No	NA	NA	NA	NA	NA	NA
CV0724A	DataRam SN D879	06/22/15	Downwind of excavation	NA	19.1	No	NA	NA	NA	NA	NA	NA
CV0724A	DataRam SN D711	06/22/15	Upwind of excavation	NA	16.6	No	NA	NA	NA	NA	NA	NA

TABLE 3
35TH AVENUE REMOVAL
SUMMARY OF PROPERTY AIR MONITORING AND CONFIRMATION AIR SAMPLING DATA
(MARCH 2015 - JULY 2015)

Location ID	Sample ID	Sample Date	Sample / DataRam Location	Air Volume (L)	DataRam Monitoring		Confirmation Air Sample Laboratory Data					
					Average Reading ($\mu\text{g}/\text{m}^3$)	¹ PM ₁₀ Action Level Exceedance 150 $\mu\text{g}/\text{m}^3$ (Yes or No)	As Result ($\mu\text{g}/\text{m}^3$)	² As Action Level Exceedance 10.0 $\mu\text{g}/\text{m}^3$ (Yes or No)	Pb Result ($\mu\text{g}/\text{m}^3$)	³ Pb Action Level Exceedance 0.15 $\mu\text{g}/\text{m}^3$ (Yes or No)	PAH Result ($\mu\text{g}/\text{m}^3$)	⁴ PAH Action Level Exceedance 100 $\mu\text{g}/\text{m}^3$ (Yes or No)
CV0748WW	DataRam SN D061	07/20/15	Downwind of excavation	NA	12.3	No	NA	NA	NA	NA	NA	NA
CV0793B	CV0793B-BAP12	04/27/15	Downwind of excavation	3,510	NA	NA	NA	NA	NA	NA	<0.28	No
CV0793B	DataRam SN D879	04/28/15	Downwind of excavation	NA	7.1	No	NA	NA	NA	NA	NA	NA
CV0793B	DataRam SN D	04/28/15	Upwind of excavation	NA	12.2	No	NA	NA	NA	NA	NA	NA
CV0912A	DataRam SN D879	04/07/15	Downwind of excavation	NA	26.1	No	NA	NA	NA	NA	NA	NA
CV0912A	DataRam SN D707	04/07/15	Upwind of excavation	NA	30.5	No	NA	NA	NA	NA	NA	NA
CV1264B	DataRam SN D602	03/24/15	Downwind of excavation	NA	3.3	No	NA	NA	NA	NA	NA	NA
CV1264B	DataRam SN D759	03/24/15	Upwind of excavation	NA	0.7	No	NA	NA	NA	NA	NA	NA
FM0047B	DataRam SN D879	06/24/15	Downwind of excavation	NA	10.7	No	NA	NA	NA	NA	NA	NA
FM0047B	DataRam SN D711	06/24/15	Upwind of excavation	NA	22.4	No	NA	NA	NA	NA	NA	NA
FM0047E	DataRam SN D879	06/25/15	Downwind of excavation	NA	DRM	No	NA	NA	NA	NA	NA	NA
FM0047E	DataRam SN D711	06/25/15	Upwind of excavation	NA	1.5	No	NA	NA	NA	NA	NA	NA
FM0215B	DataRAM SN D879	05/06/15	Downwind of excavation	NA	12.9	No	NA	NA	NA	NA	NA	NA
FM0215B	DataRAM SN D707	05/06/15	Downwind of excavation	NA	12.3	No	NA	NA	NA	NA	NA	NA
HP0125A	DataRAM SN D879	06/02/15	Downwind of excavation	NA	17.8	No	NA	NA	NA	NA	NA	NA

TABLE 3
35TH AVENUE REMOVAL
SUMMARY OF PROPERTY AIR MONITORING AND CONFIRMATION AIR SAMPLING DATA
(MARCH 2015 - JULY 2015)

Notes:

< - Analyte was not detected above the sample quantitation limit

As - Arsenic

J - Concentration is estimated

L - Liter

NA - Not Applicable

NAAQS - National Ambient Air Quality Standards

NIOSH - National Institute for Occupational Safety and Health

OSHA - Occupational Safety and Health Administration

PAH - Polycyclic aromatic hydrocarbon

Pb - Lead

SN - Serial Number

$\mu\text{g}/\text{m}^3$ - Micrograms per cubic meter

¹ - PM₁₀ Action Level taken from NAAQS.

² - As Action Level taken from OSHA.

³ - Pb Action Level taken from NAAQS.

⁴ - PAH Action Level taken from NIOSH.

APPENDIX C
XRF SCREENING RESULTS

Appendix C
Phase III Removal
35th Avenue Superfund Site
XRF Screening Results
March 2015 through July 2015

Location ID	Sample ID	Date Collected	Analyte	Result	Error	Error
CV0197C	CV0197C-COMP-XRF1-18i	3/18/2015	Lead	11.33	3.05	7.39
CV0197C	CV0197C-COMP-XRF1-18i	3/18/2015	Arsenic	8.07	3.05	6.09
CV0312A	CV0312A-COMP-XRF1-12i	4/15/2015	Lead	142.66	11.04	7.54
CV0312A	CV0312A-COMP-XRF1-12i	4/15/2015	Arsenic	95.55	10.27	6.05
CV0312A	CV0312A-COMP-XRF2-12i	4/16/2015	Lead	20.37	5.01	16.08
CV0312A	CV0312A-COMP-XRF2-12i	6/15/2015	Arsenic	42.8	5.49	12.05
CV0252A	CV0252A-COMP-XRF1-24i	6/15/2015	Lead	3099.61	45.03	27.54
CV0252A	CV0252A-COMP-XRF1-24i	6/15/2015	Arsenic	NA	48.58	20.95
CV0252A	CV0252A-COMP-XRF2-24i	6/15/2015	Lead	1355.12	26.97	34.42
CV0252A	CV0252A-COMP-XRF2-24i	6/15/2015	Arsenic	52.28	20.05	38.63
CV0252A	CV0252A-COMP-XRF3-24i	6/15/2015	Lead	717.9	20.68	19.13
CV0252A	CV0252A-COMP-XRF3-24i	6/15/2015	Arsenic	98.57	16.1	23.05
CV0252A	CV0252A-COMP-XRF4-24i	6/15/2015	Lead	423.74	13.64	10.21
CV0252A	CV0252A-COMP-XRF4-24i	6/15/2015	Arsenic	22.84	10.23	8.35
CV0252A	CV0252A-COMP-XRF5-24i	6/15/2015	Lead	409.41	12.97	19.55
CV0252A	CV0252A-COMP-XRF5-24i	6/15/2015	Arsenic	19.04	9.69	14.62
CV0252A	CV0252A-COMP-XRF6-24i	6/15/2015	Lead	391.04	12.82	25.58
CV0252A	CV0252A-COMP-XRF6-24i	6/15/2015	Arsenic	19.67	9.6	27.97
CV0252A	CV0252A-COMP-XRF7-24i	6/15/2015	Lead	499.99	15.24	25.98
CV0252A	CV0252A-COMP-XRF7-24i	6/15/2015	Arsenic	26.41	11.42	19.34
CV0252A	CV0252A-COMP-XRF8-24i	6/15/2015	Lead	83.87	11.17	15.87
CV0252A	CV0252A-COMP-XRF8-24i	6/15/2015	Arsenic	NA	12.69	12.05
CV0252A	CV0252A-COMP-XRF9-24i	6/15/2015	Lead	88.46	6.52	20.53
CV0252A	CV0252A-COMP-XRF9-24i	6/15/2015	Arsenic	11.96	5.09	15.49
CV0252A	CV0252A-COMP-XRF10-24i	6/15/2015	Lead	138.12	7.89	10.01
CV0252A	CV0252A-COMP-XRF10-24i	6/15/2015	Arsenic	20.82	6.19	7.61
CV0252A	CV0252A-COMP-XRF11-24i	6/15/2015	Lead	80.15	6.08	9.48
CV0252A	CV0252A-COMP-XRF11-24i	6/15/2015	Arsenic	7.15	4.66	7.21
CV0252A	CV0252A-COMP-XRF12-24i	6/16/2015	Lead	468.02	15.45	8.5
CV0252A	CV0252A-COMP-XRF12-24i	6/16/2015	Arsenic	36.87	11.72	6.68

Appendix C
Phase III Removal
35th Avenue Superfund Site
XRF Screening Results
March 2015 through July 2015

Location ID	Sample ID	Date Collected	Analyte	Result	Error	Error
CV0252A	CV0252A-COMP-XRF13-24i	6/16/2015	Lead	1257.65	26.48	14.12
CV0252A	CV0252A-COMP-XRF13-24i	6/16/2015	Arsenic	102.43	20.09	11.34
CV0252A	CV0252A-COMP-XRF14-24i	6/16/2015	Lead	724.02	19.6	10.56
CV0252A	CV0252A-COMP-XRF14-24i	6/16/2015	Arsenic	41.2	14.7	8.9
CV0252A	CV0252A-COMP-XRF15-24i	6/16/2015	Lead	452.69	14.13	3.56
CV0252A	CV0252A-COMP-XRF15-24i	6/16/2015	Arsenic	25.55	10.6	2.98
CV0252A	CV0252A-COMP-XRF16-24i	6/16/2015	Lead	668.88	17.8	11.23
CV0252A	CV0252A-COMP-XRF16-24i	6/16/2015	Arsenic	28.44	13.26	8.52
CV0748WW	CV0748KK-COMP-XRF1-24i	7/20/2015	Lead	84.76	6.85	10.46
CV0748WW	CV0748KK-COMP-XRF1-24i	7/20/2015	Arsenic	NA	7.67	7.95
CV0748WW	CV0748KK-COMP-XRF2-24i	7/20/2015	Lead	115.08	10.21	10.36
CV0748WW	CV0748KK-COMP-XRF2-24i	7/20/2015	Arsenic	18.61	8.02	7.87
CV0748WW	CV0748KK-COMP-XRF3-24i	7/20/2015	Lead	NA	711.93	8.52
CV0748WW	CV0748KK-COMP-XRF3-24i	7/20/2015	Arsenic	NA	494.37	6.5
CV0748WW	CV0748KK-COMP-XRF4-24i	7/20/2015	Lead	381.84	13.65	7.47
CV0748WW	CV0748KK-COMP-XRF4-24i	7/20/2015	Arsenic	NA	15.12	5.79
CV0748WW	CV0748KK-COMP-XRF5-24i	7/20/2015	Lead	135.82	24.22	7.51
CV0748WW	CV0748KK-COMP-XRF5-24i	7/20/2015	Arsenic	NA	27.62	6.33
CV0748WW	CV0748KK-COMP-XRF6-24i	7/20/2015	Lead	NA	24.76	8.11
CV0748WW	CV0748KK-COMP-XRF6-24i	7/20/2015	Arsenic	NA	21.45	6.82
CV0748WW	CV0748KK-COMP-XRF7-24i	7/20/2015	Lead	52.39	21.42	7.93
CV0748WW	CV0748KK-COMP-XRF7-24i	7/20/2015	Arsenic	NA	28.01	6.24
CV0748WW	CV0748KK-COMP-XRF8-24i	7/20/2015	Lead	94.87	28.05	5.49
CV0748WW	CV0748KK-COMP-XRF8-24i	7/20/2015	Arsenic	NA	32.64	1.2
CV0748WW	CV0748KK-COMP-XRF9-24i	7/20/2015	Lead	153.17	53.17	6.97
CV0748WW	CV0748KK-COMP-XRF9-24i	7/20/2015	Arsenic	NA	64.37	5.49
CV0748WW	CV0748KK-COMP-XRF10-24i	7/20/2015	Lead	97.76	41.17	4.87
CV0748WW	CV0748KK-COMP-XRF10-24i	7/20/2015	Arsenic	NA	46.41	5.65
CV0748WW	CV0748KK-COMP-XRF11-24i	7/20/2015	Lead	68.14	16.71	5.74
CV0748WW	CV0748KK-COMP-XRF11-24i	7/20/2015	Arsenic	NA	19.66	6.64

Appendix C
Phase III Removal
35th Avenue Superfund Site
XRF Screening Results
March 2015 through July 2015

Location ID	Sample ID	Date Collected	Analyte	Result	Error	Error
CV0748WW	CV0748KK-COMP-XRF12-24i	7/20/2015	Lead	621.18	93.72	5.39
CV0748WW	CV0748KK-COMP-XRF12-24i	7/20/2015	Arsenic	NA	102.67	6.21
CV0748WW	CV0748KK-COMP-XRF13-24i	7/20/2015	Lead	200.32	62.67	6.42
CV0748WW	CV0748KK-COMP-XRF13-24i	7/20/2015	Arsenic	NA	68.61	4.93

APPENDIX D
PHOTOGRAPHIC LOG

Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3436 30th Way North

Date: February 26, 2013

Photographer: Brittney Brown

Official Photograph No. 1:

View of the front yard of the property prior to removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3436 30th Way North

Date: February 26, 2013

Photographer: Brittney Brown

Official Photograph No. 2:

View of the back yard of the property prior to removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3436 30th Way North

Date: February 26, 2013

Photographer: Brittney Brown

Official Photograph No. 3:

View of the back yard of the property prior to removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3436 30th Way North

Date: February 26, 2013

Photographer: Brittney Brown

Official Photograph No. 4:

View of the back yard of the property prior to removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3414 31st Place North

Date: May 14, 2015

Photographer: Doug Fraley

Official Photograph No. 1:
View of the front yard prior to removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3414 31st Place North

Date: May 12, 2015

Photographer: Doug Fraley

Official Photograph No. 2:
View of side yard prior to removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3414 31st Place North

Date: May 12, 2015

Photographer: Doug Fraley

Official Photograph No. 3:

View of the back yard prior to excavation activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3414 31st Place North

Date: May 12, 2015

Photographer: Doug Fraley

Official Photograph No. 4:

View of side yard prior to removal activities.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3414 31st Place North
Date: May 12, 2015
Photographer: Doug Fraley

Official Photograph No. 3:
View of excavation activities on the front yard.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3414 31st Place North
Date: May 14, 2015
Photographer: Doug Fraley

Official Photograph No. 4:
View of backfill activities in the back yard.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3414 31st Place North
Date: May 14, 2015
Photographer: Doug Fraley

Official Photograph No. 3:
View of completed backfill activities in the back and side yard.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3414 31st Place North
Date: May 14, 2015
Photographer: Doug Fraley

Official Photograph No. 4:
View of ERRS moving a shed back into the back yard following excavation and backfill activities.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3414 31st Place North
Date: May 14, 2015
Photographer: Doug Fraley

Official Photograph No. 3:
Another view of ERRS moving the shed to the back yard.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3414 31st Place North
Date: May 14, 2015
Photographer: Doug Fraley

Official Photograph No. 4:
View of the backfilled pad for the shed.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3414 31st Place North
Date: May 14, 2015
Photographer: Doug Fraley

Official Photograph No. 3:
View of completed field activities in the back yard.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3338 31st Way North

Date: April 8, 2015

Photographer: Ryan Stubbs

Official Photograph No. 1:
View of the front yard prior to removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3338 31st Way North

Date: April 8, 2015

Photographer: Ryan Stubbs

Official Photograph No. 2:
View of the front yard prior to removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3338 31st Way North

Date: May 8, 2015

Photographer: Doug Fraley

Official Photograph No. 3:
View of the excavation in the front yard.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3338 31st Way North

Date: May 8, 2015

Photographer: Doug Fraley

Official Photograph No. 4:
View of the excavation in the front yard.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3404 32nd Ave North

Date: January 6, 2015

Photographer: Ryan Stubbs

Official Photograph No. 1:
View of front yard prior to removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3404 32nd Ave North

Date: January 6, 2015

Photographer: Ryan Stubbs

Official Photograph No. 2:
View of the back yard prior to removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3321 32nd Place North

Date: May 19, 2015

Photographer: Jerome Partap

Official Photograph No. 1:
View of front yard prior to removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3321 32nd Place North

Date: May 19, 2015

Photographer: Jerome Partap

Official Photograph No. 2:
View of the side yard.



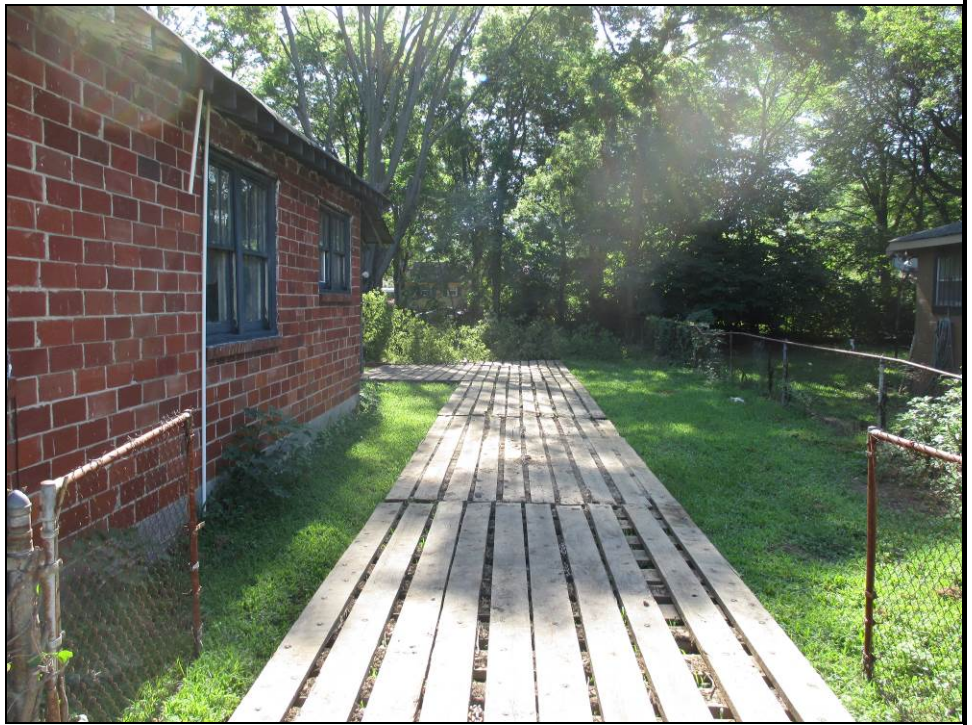
Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3321 32nd Place North

Date: June 17, 2015

Photographer: Doug Fraley

Official Photograph No. 3:
View of swamp mats in place on side yard in prep for excavation activities.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3321 32nd Place North

Date: June 17, 2015

Photographer: Doug Fraley

Official Photograph No. 4:
View of swamp mats in place in back yard in prep for excavation activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

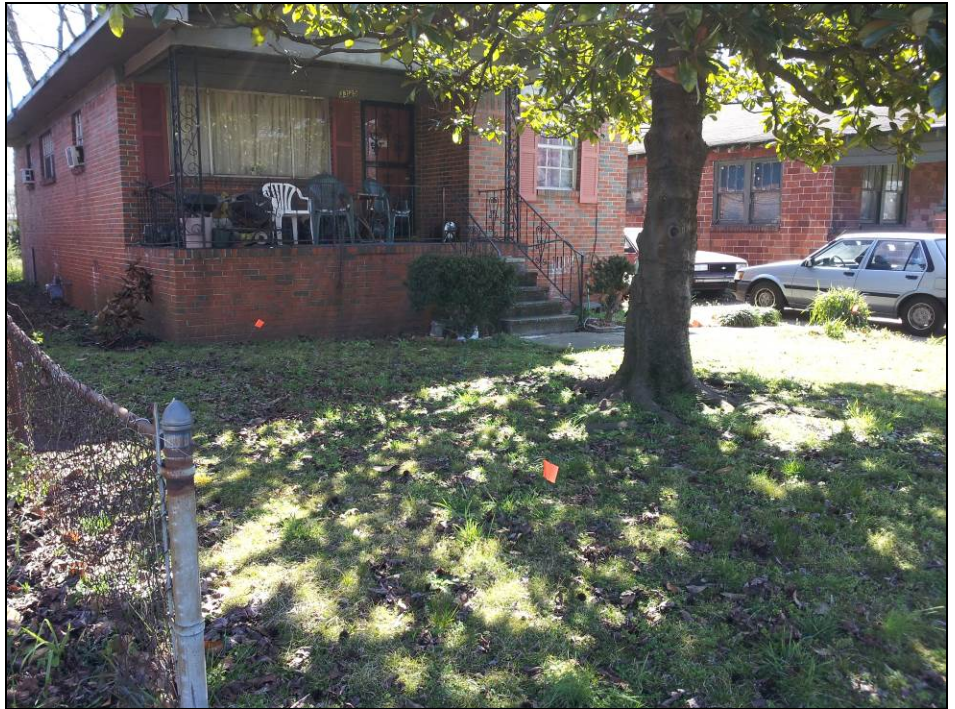
Location: 3325 32nd Place North

Date: March 12, 2013

Photographer: Adam Davis

Official Photograph No. 1:

View of front yard prior to removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

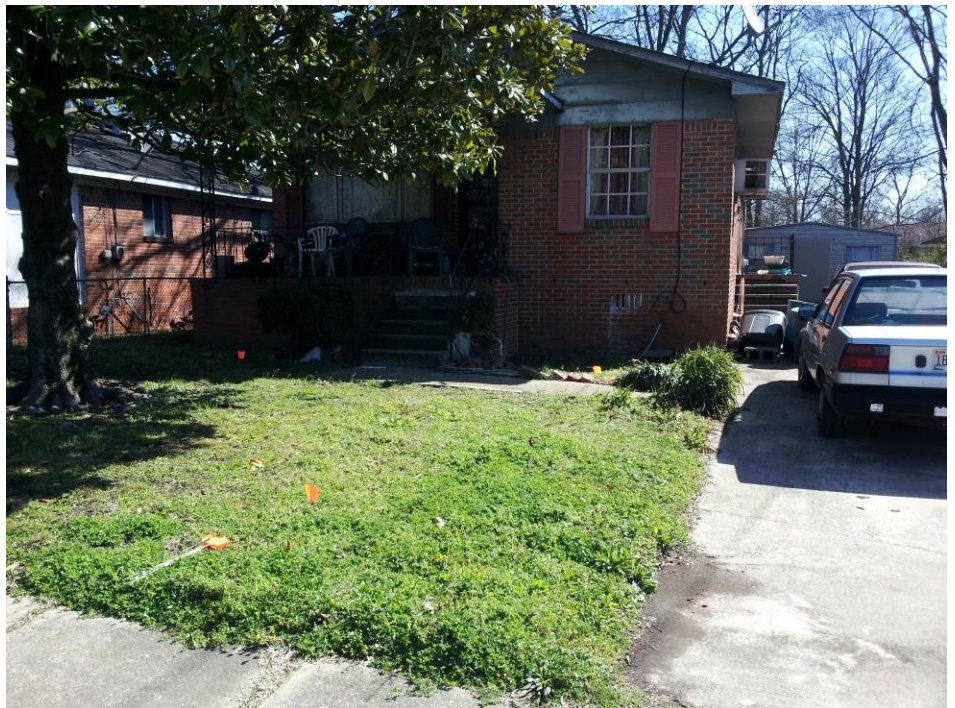
Location: 3325 32nd Place North

Date: March 12, 2013

Photographer: Adam Davis

Official Photograph No. 2:

View of front yard prior to removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3325 32nd Place North

Date: March 12, 2013

Photographer: Adam Davis

Official Photograph No. 3:

View of the back yard prior to removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3325 32nd Place North

Date: April 8, 2015

Photographer: Ryan Stubbs

Official Photograph No. 4:

View of the back yard prior to removal activities.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3301 32nd St North
Date: March 7, 2013
Photographer: Doug Fraley

Official Photograph No. 1:
 View of the front yard prior to removal activities.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3301 32nd St North
Date: June 15, 2015
Photographer: Doug Fraley

Official Photograph No. 2:
 View of excavation activities in the front yard area.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3301 32nd St North
Date: June 17, 2015
Photographer: Doug Fraley

Official Photograph No. 3:
View of the front yard following backfill and sod installation.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3301 32nd St North
Date: June 15, 2015
Photographer: Doug Fraley

Official Photograph No. 4:
View of the front yard following backfill and sod installation.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3313 32nd St North

Date: March 10, 2015

Photographer: Nairimer Berrios Cartagena

Official Photograph No. 1:

View of property prior to removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3313 32nd St North

Date: March 10, 2015

Photographer: Nairimer Berrios Cartagena

Official Photograph No. 2:

View of property prior to removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3313 32nd St North

Date: March 10, 2015

Photographer: Nairimer Berrios Cartagena

Official Photograph No. 3:
View of the back yard prior to removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3313 32nd St North

Date: March 10, 2015

Photographer: Nairimer Berrios Cartagena

Official Photograph No. 4:
View of the back yard prior to removal activities.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3313 32nd St North
Date: June 4, 2015
Photographer: Doug Fraley

Official Photograph No. 5:
View of excavation activities in the back yard.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3313 32nd St North
Date: June 8, 2015
Photographer: Doug Fraley

Official Photograph No. 6:
View of excavation activities in the back yard.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3313 32nd St North

Date: June 4, 2015

Photographer: Doug Fraley

Official Photograph No. 7:
View of the excavation in the back yard.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3313 32nd St North

Date: June 9, 2015

Photographer: Doug Fraley

Official Photograph No. 8:
View of excavation activities in the side yard.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3313 32nd St North
Date: June 10, 2015
Photographer: Doug Fraley

Official Photograph No. 9:
View of backfill activities.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3313 32nd St North
Date: June 10, 2015
Photographer: Doug Fraley

Official Photograph No. 10:
View of backfill in the front yard.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3313 32nd St North

Date: June 17, 2015

Photographer: Doug Fraley

Official Photograph No. 11:
View of completed removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3313 32nd St North

Date: June 17, 2015

Photographer: Doug Fraley

Official Photograph No. 12:
View of completed removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3321 32nd Street North

Date: December 17, 2012

Photographer: Doug Fraley

Official Photograph No. 1:

View of property prior to removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3321 32nd Street North

Date: December 17, 2012

Photographer: Doug Fraley

Official Photograph No. 2:

View of property prior to removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3321 32nd Street North

Date: December 17, 2012

Photographer: Doug Fraley

Official Photograph No. 3:

View of property prior to removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3321 32nd Street North

Date: December 17, 2012

Photographer: Doug Fraley

Official Photograph No. 4:

View of property prior to removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3431 33rd Avenue North

Date: March 12, 2015

Photographer: Nairimer Berrios Cartagena

Official Photograph No. 1:

View of property prior to removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3431 33rd Avenue North

Date: March 12, 2015

Photographer: Nairimer Berrios Cartagena

Official Photograph No. 2:

View of property prior to removal activities.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3431 33rd Avenue North
Date: May 4, 2015
Photographer: Doug Fraley

Official Photograph No. 3:
View of excavation activities in the back yard.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3431 33rd Avenue North
Date: May 4, 2015
Photographer: Doug Fraley

Official Photograph No. 4:
View of excavation activities in the back yard.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3431 33rd Avenue North
Date: May 5, 2015
Photographer: Doug Fraley

Official Photograph No. 3:
View of excavation activities in a side yard.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3431 33rd Avenue North
Date: May 5, 2015
Photographer: Doug Fraley

Official Photograph No. 4:
View of the excavation in the back yard.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3431 33rd Avenue North
Date: May 5, 2015
Photographer: Doug Fraley

Official Photograph No. 3:
View of excavation in the back and the west side yards.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3431 33rd Avenue North
Date: May 6, 2015
Photographer: Doug Fraley

Official Photograph No. 4:
View of the back fill in the west side yard.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3449 33rd Avenue North

Date: January 28, 2015

Photographer: Ryan Stubbs

Official Photograph No. 1:

View of the back yard prior to removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3449 33rd Avenue North

Date: April 15, 2015

Photographer: Doug Fraley

Official Photograph No. 2:

View of the property in the background during removal activities.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3449 33rd Avenue North
Date: April 15, 2015
Photographer: Doug Fraley

Official Photograph No. 3:
View of excavation activities in the back yard.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3449 33rd Avenue North
Date: April 15, 2015
Photographer: Doug Fraley

Official Photograph No. 4:
View of the excavation activities in the back yard.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3449 33rd Avenue North
Date: April 15, 2015
Photographer: Doug Fraley

Official Photograph No. 5:
View of the backfill activities in the back yard.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3449 33rd Avenue North
Date: April 22, 2015
Photographer: Doug Fraley

Official Photograph No. 6:
View of the backfill in the back yard.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3449 33rd Avenue North
Date: April 15, 2015
Photographer: Doug Fraley

Official Photograph No. 7:
View of the backfill in the back yard.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3449 33rd Avenue North
Date: April 24, 2015
Photographer: Doug Fraley

Official Photograph No. 8:
View of the backfill in the driveway leading to the back yard.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3420 33rd Court North
Date: January 7, 2015
Photographer: Ryan Stubbs

Official Photograph No. 1:
View of the back yard prior to removal activities facing west.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3420 33rd Court North
Date: July 27, 2015
Photographer: Doug Fraley

Official Photograph No. 2:
View of the excavation in the back yard facing west.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3420 33rd Court North

Date: July 27, 2015

Photographer: Doug Fraley

Official Photograph No. 3:

View of excavation in the back yard facing east towards bordering property CV0441.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3428 33rd Court North

Date: March 11, 2015

Photographer: Nairimer Berrios Cartagena

Official Photograph No. 1:

View of the property facing north prior to removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3428 33rd Court North

Date: March 11, 2015

Photographer: Nairimer Berrios Cartagena

Official Photograph No. 2:

View of the property facing north prior to removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3428 33rd Court North

Date: March 5, 2013

Photographer: Adam Davis

Official Photograph No. 3:

View of the property facing south prior to removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3428 33rd Court North

Date: July 27, 2015

Photographer: Doug Fraley

Official Photograph No. 4:

View of the excavation facing south.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3428 33rd Court North

Date: July 30, 2015

Photographer: Doug Fraley

Official Photograph No. 5:
View of the excavation facing north.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3369 33rd Place North
Date: May 27, 2015
Photographer: Ryan Stubbs

Official Photograph No. 1:
View of the front yard of the property during removal activities facing east.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3369 33rd Place North
Date: May 28, 2015
Photographer: Ryan Stubbs

Official Photograph No. 2:
View of tree removal operations in the back yard.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3369 33rd Place North
Date: June 1, 2015
Photographer: Doug Fraley

Official Photograph No. 3:
View of the excavation activities in the back yard facing east.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3369 33rd Place North
Date: June 1, 2015
Photographer: Doug Fraley

Official Photograph No. 4:
View of the excavation activities in the back yard.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3369 33rd Place North
Date: June 3, 2015
Photographer: Doug Fraley

Official Photograph No. 5:
View of the excavation activities in the back yard facing west.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3369 33rd Place North
Date: June 4, 2015
Photographer: Doug Fraley

Official Photograph No. 6:
View of the backfill operations in the back yard facing west.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3384 33rd Place North
Date: January 5, 2015
Photographer: Ryan Stubbs

Official Photograph No. 1:
View of front yard prior to removal activities facing west.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3384 33rd Place North
Date: March 6, 2015
Photographer: Doug Fraley

Official Photograph No. 2:
View of the front yard prior to removal activities facing north.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3384 33rd Place North

Date: March 20, 2015

Photographer: Doug Fraley

Official Photograph No. 3:

View of the excavation activities in the front yard.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3384 33rd Place North

Date: March 20, 2015

Photographer: Doug Fraley

Official Photograph No. 4:

View of the excavation activities in the front yard.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3021 33rd Terrace North
Date: February 2, 2013
Photographer: Carly Schulz

Official Photograph No. 1:
View of the front yard prior to removal activities facing south.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3021 33rd Terrace North
Date: February 2, 2013
Photographer: Carly Schulz

Official Photograph No. 2:
View of the front yard prior to removal activities facing southeast.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3021 33rd Terrace North
Date: April 8, 2015
Photographer: Doug Fraley

Official Photograph No. 3:
View of the backfill operations in the front yard.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3021 33rd Terrace North
Date: April 8, 2015
Photographer: Doug Fraley

Official Photograph No. 4:
View of the backfill operations in the front yard.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3035 33rd Terrace North
Date: January 28, 2015
Photographer: Ryan Stubbs

Official Photograph No. 1:
View of the front yard prior to removal activities facing south.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3035 33rd Terrace North
Date: January 28, 2015
Photographer: Ryan Stubbs

Official Photograph No. 2:
View of the back yard prior to removal activities facing south.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3035 33rd Terrace North

Date: April 22, 2015

Photographer: Doug Fraley

Official Photograph No. 3:

View of the excavation activities in the back yard facing north.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

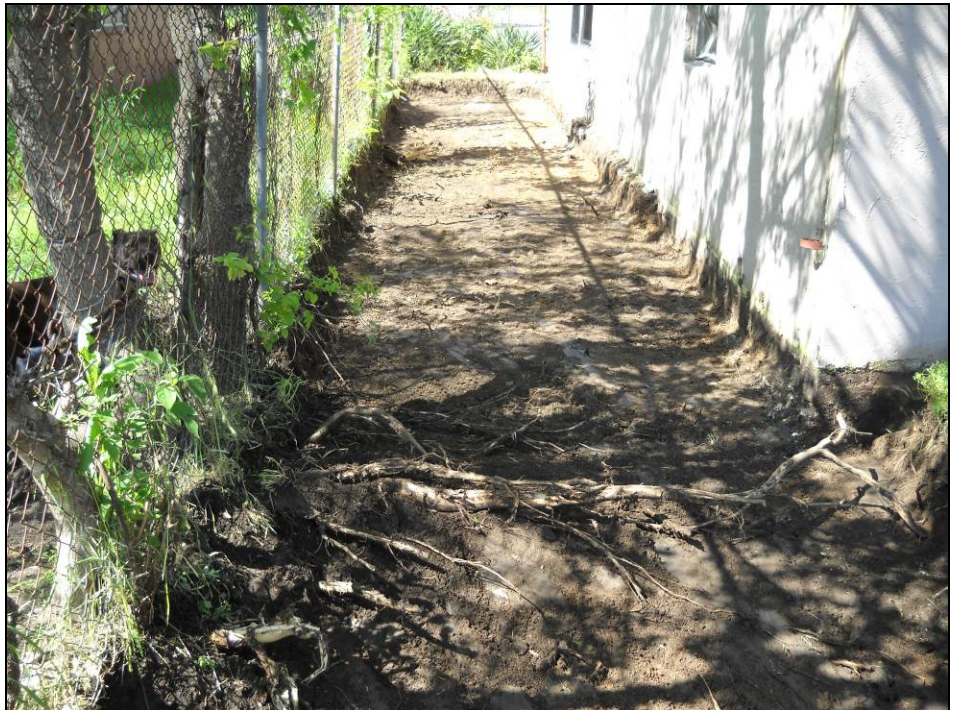
Location: 3035 33rd Terrace North

Date: April 22, 2015

Photographer: Doug Fraley

Official Photograph No. 4:

View of the excavation in the side yard facing north.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3035 33rd Terrace North
Date: April 24, 2015
Photographer: Doug Fraley

Official Photograph No. 5:
View of the backfill in the side yard facing south.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3035 33rd Terrace North
Date: April 23, 2015
Photographer: Doug Fraley

Official Photograph No. 6:
View of the excavation in the back yard.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3035 33rd Terrace North

Date: April 27, 2015

Photographer: Doug Fraley

Official Photograph No. 7:
View of the backfill operations in the back yard facing north.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3035 33rd Terrace North

Date: April 24, 2015

Photographer: Doug Fraley

Official Photograph No. 8:
View of the backfill in the back yard facing north



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3035 33rd Terrace North
Date: April 27, 2015
Photographer: Doug Fraley

Official Photograph No. 9:
View of the backfill operations in the front yard south.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3030 34th Avenue North

Date: May 1, 2015

Photographer: Doug Fraley

Official Photograph No. 1:

View of the property during excavation activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3030 34th Avenue North

Date: May 1, 2015

Photographer: Doug Fraley

Official Photograph No. 2:

View of the excavation.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3344 34th Street North
Date: November 29, 2012
Photographer: Ryan Stubbs

Official Photograph No. 1:
View of the front yard prior to removal activities facing west.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3344 34th Street North
Date: November 29, 2012
Photographer: Ryan Stubbs

Official Photograph No. 2:
View of the back yard prior to removal activities facing east.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3344 34th Street North

Date: June 16, 2015

Photographer: Doug Fraley

Official Photograph No. 3:

View of the excavation activities in the back yard facing east.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3344 34th Street North

Date: June 16, 2015

Photographer: Doug Fraley

Official Photograph No. 4:

View of the excavation activities in the back yard facing west.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Subash Patel

Location: 3136 34th Terrace North
Date: March 6, 2015
Photographer: Doug Fraley

Official Photograph No. 1:
Front yard before removal begins.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3933 Huntsville Road

Date: January 7, 2015

Photographer: Ryan Stubbs

Official Photograph No. 1:

View of the front yard before removal activities facing east.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3933 Huntsville Road

Date: February 28, 2013

Photographer: Doug Fraley

Official Photograph No. 2:

View of the back yard before removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3933 Huntsville Road

Date: June 22, 2015

Photographer: Doug Fraley

Official Photograph No. 3:
View of the excavation in the back yard.



CV0748

Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3031 29th Avenue

Date: July 23, 2014

Photographer: Doug Fraley

Official Photograph No. 1:

View of property CV0748 at Birmingham Housing Authority.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3232 30th Court North

Date: April 28, 2015

Photographer: Doug Fraley

Official Photograph No. 1:
View of the property during removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3232 30th Court North

Date: April 28, 2015

Photographer: Doug Fraley

Official Photograph No. 2:
View of the excavation activities in the back yard.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3232 30th Court North

Date: April 29, 2015

Photographer: Doug Fraley

Official Photograph No. 3:
View of the excavation in the back yard.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3232 30th Court North

Date: April 29, 2015

Photographer: Doug Fraley

Official Photograph No. 4:
View of the excavation in the back yard.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3410 31st Ave North

Date: January 24, 2013

Photographer: Carly Schulz

Official Photograph No. 1:

View of the back yard prior to removal activities facing east.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3410 31st Ave North

Date: January 24, 2013

Photographer: Carly Schulz

Official Photograph No. 2:

View of the back yard prior to removal activities facing south.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3410 31st Ave North
Date: May 15, 2015
Photographer: Doug Fraley

Official Photograph No. 3:
View of the excavation activities in the front yard facing north.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3410 31st Ave North
Date: May 15, 2015
Photographer: Doug Fraley

Official Photograph No. 4:
View of the excavation activities facing north.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3117 34th Ave North

Date: May 21, 2013

Photographer: Adam Davis

Official Photograph No. 1:
View of the front yard area prior to removal activities facing south.



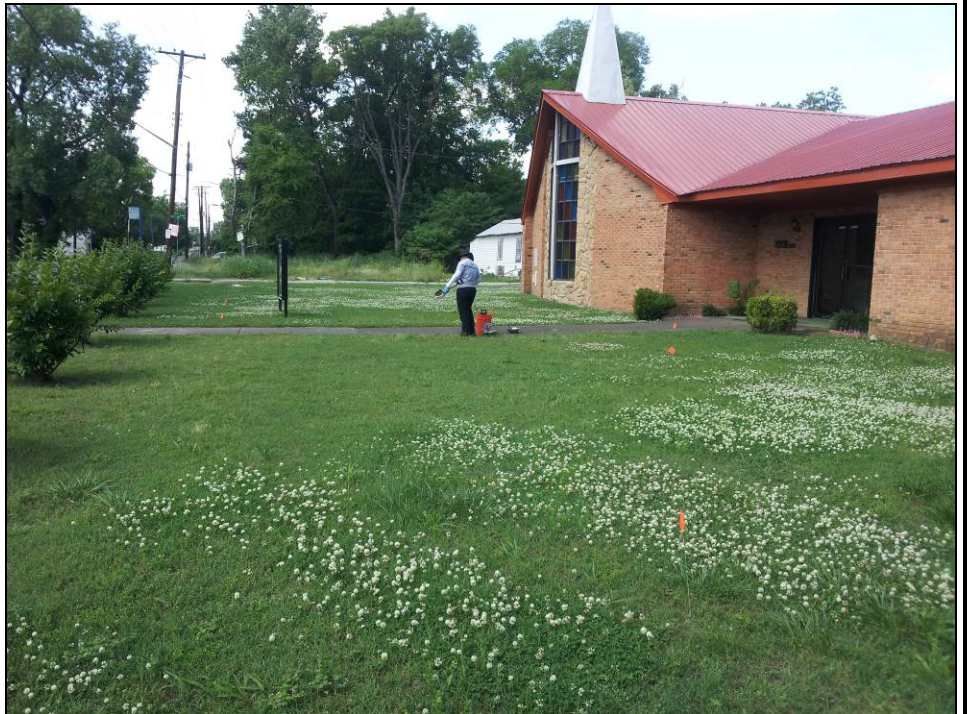
Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3117 34th Ave North

Date: May 21, 2013

Photographer: Adam Davis

Official Photograph No. 2:
View of the front yard area prior to removal activities facing north.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3117 34th Ave North
Date: April 7, 2015
Photographer: Doug Fraley

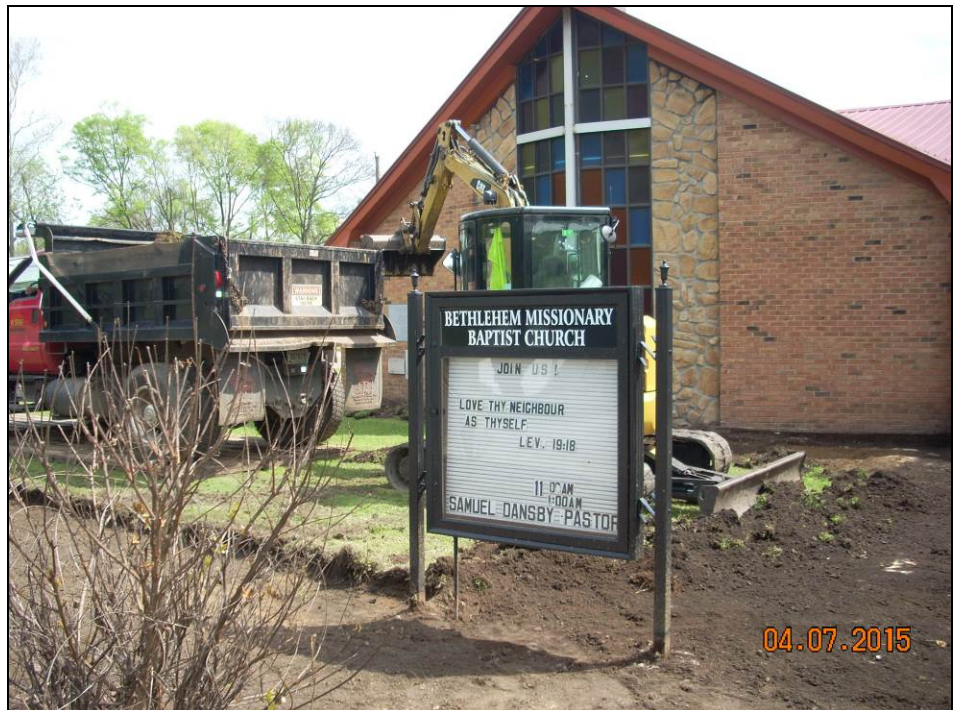
Official Photograph No. 3:
 View of the excavation activities facing north.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3117 34th Ave North
Date: April 7, 2015
Photographer: Doug Fraley

Official Photograph No. 4:
 View of the excavation activities facing northeast.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3117 34th Ave North
Date: April 7, 2015
Photographer: Doug Fraley

Official Photograph No. 5:
 View of the excavation activities facing northwest.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3117 34th Ave North
Date: April 7, 2015
Photographer: Doug Fraley

Official Photograph No. 6:
 View of the excavation and backfill activities facing north.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3436 27th Court North

Date: April 29, 2015

Photographer: Doug Fraley

Official Photograph No. 1:

View of the beginning of excavation activities along the east side of the house facing north-northwest.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3436 27th Court North

Date: April 29, 2015

Photographer: Doug Fraley

Official Photograph No. 2:

View of the excavation activities in the front yard facing northwest.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3436 27th Court North
Date: April 29, 2015
Photographer: Doug Fraley

Official Photograph No. 3:
View of the excavation activities in the front yard.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3436 27th Court North
Date: April 29, 2015
Photographer: Doug Fraley

Official Photograph No. 4:
View of backfill activities in the front yard facing southeast.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3439 29th Ave North
Date: January 7, 2015
Photographer: Ryan Stubbs

Official Photograph No. 1:
View of the back yard prior to removal activities facing south.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3439 29th Ave North
Date: March 17, 2015
Photographer: Doug Fraley

Official Photograph No. 2:
View of the back yard prior to excavation during tree removal activities facing west.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3439 29th Ave North

Date: March 24, 2015

Photographer: Doug Fraley

Official Photograph No. 3:

View of the excavation activities in the back yard facing southeast.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3439 29th Ave North

Date: March 24, 2015

Photographer: Doug Fraley

Official Photograph No. 4:

View of the excavation activities in the back yard south.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3437 30th Ave North

Date: June 11, 2015

Photographer: Doug Fraley

Official Photograph No. 1:
View of the swamp mats in place during excavation activities.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3437 30th Ave North

Date: June 11, 2015

Photographer: Doug Fraley

Official Photograph No. 2:
View of the excavation in progress in the back yard.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3437 30th Ave North

Date: March 11, 2015

Photographer: Nairimer Berrios Cartagena

Official Photograph No. 3:
View of the west side yard prior to removal activities facing south.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3437 30th Ave North

Date: June 11, 2015

Photographer: Doug Fraley

Official Photograph No. 4:
View of the excavation on the west side yard facing south.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 4005 29th Street North
Date: February 21, 2013
Photographer: Nairimer Berrios Cartagena

Official Photograph No. 1:
View of the property prior to removal activities facing east.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 4005 29th Street North
Date: June 24, 2015
Photographer: Doug Fraley

Official Photograph No. 2:
View of the excavation on the north side of the house facing west.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 4005 29th Street North
Date: March 12, 2015
Photographer: Nairimer Berrios Cartagena

Official Photograph No. 3:
 View of the front yard prior to removal activities southeast.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 4005 29th Street North
Date: June 24, 2015
Photographer: Doug Fraley

Official Photograph No. 4:
 View of the excavation in the front yard facing south.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 4005 29th Street North

Date: June 26, 2015

Photographer: Doug Fraley

Official Photograph No. 5:
View of the backfill completed in the front yard facing northeast.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 4005 29th St North

Date: June 26, 2015

Photographer: Doug Fraley

Official Photograph No. 6:
Property after backfill completed facing east.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3158 46th Ave North
Date: December 3, 2012
Photographer: Ryan Stubbs

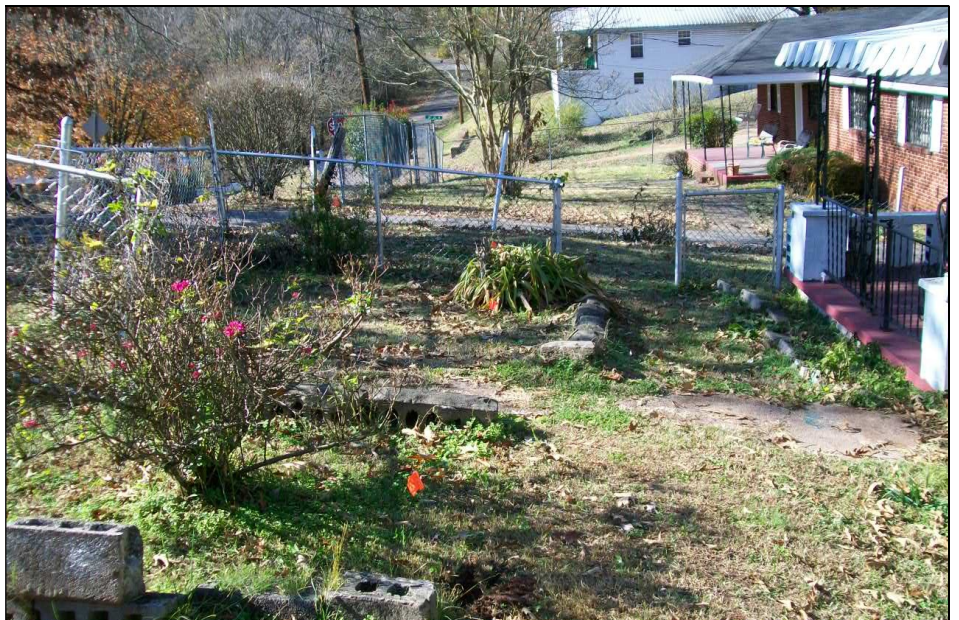
Official Photograph No. 1:
View of the front of the property prior to removal activities facing north.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3158 46th Ave North
Date: December 3, 2012
Photographer: Ryan Stubbs

Official Photograph No. 2:
View of the front of the property prior to removal activities facing west.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3142 46th Ave North

Date: December 3, 2012

Photographer: Ryan Stubbs

Official Photograph No. 3:

View of the back yard prior to removal activities.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3142 46th Ave North

Date: December 3, 2012

Photographer: Ryan Stubbs

Official Photograph No. 4:

View of the back yard prior to removal activities.



**Site: 35th Avenue
Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine**

**Location: 3142 46th Ave
North
Date: May 6, 2015
Photographer: Ryan Stubbs**

**Official Photograph No. 5:
View of the back yard
during removal activities.**



**Site: 35th Avenue
Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine**

**Location: 3142 46th Ave
North
Date: May 6, 2015
Photographer: Ryan Stubbs**

**Official Photograph No. 6:
View of the back yard
during removal activities.**



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3649 42nd Avenue North
Date: January 6, 2015
Photographer: Ryan Stubbs

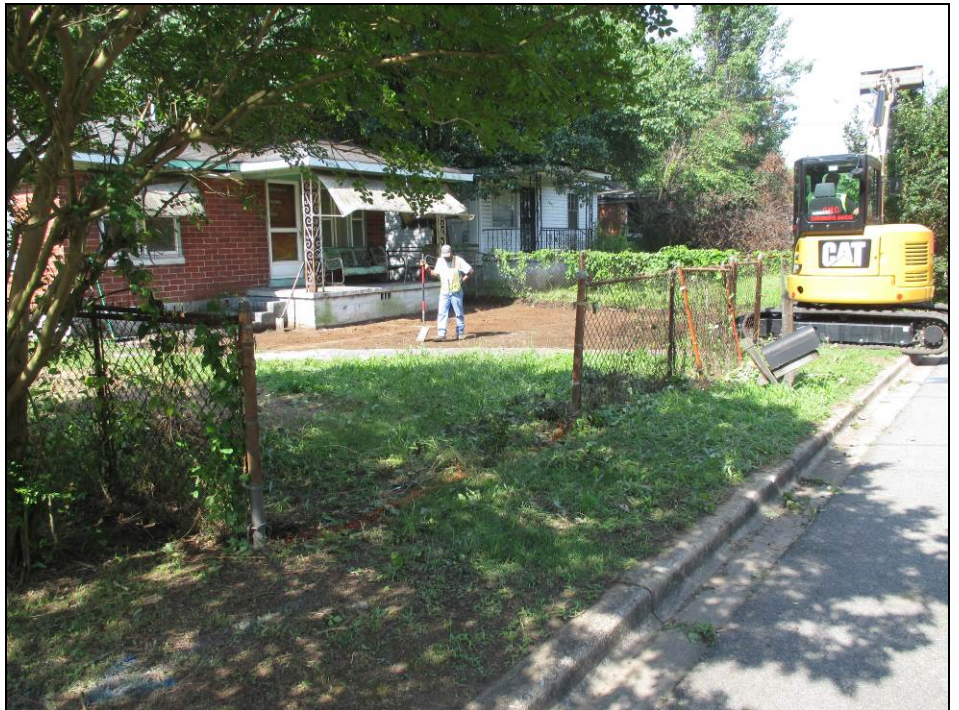
Official Photograph No. 1:
View of the front yard prior to removal activities facing south.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3649 42nd Avenue North
Date: June 4, 2015
Photographer: Doug Fraley

Official Photograph No. 2:
View of the excavation in the front yard facing southwest.



Site: 35th Avenue Superfund Site
Contract: EP-S4-15-01
TDD: 001/OT-01-001
OSC: Rick Jardine

Location: 3649 42nd Avenue North
Date: June 4, 2015
Photographer: Doug Fraley

Official Photograph No. 3:
View of the completed backfill in the front yard facing south.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3708 43rd Avenue North

Date: March 6, 2015

Photographer: Doug Fraley

Official Photograph No. 1:

Property before removal activities facing west.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3708 43rd Avenue North

Date: March 16, 2015

Photographer: Doug Fraley

Official Photograph No. 2:

View of the backfill activities facing west.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3708 43rd Avenue North

Date: March 16, 2015

Photographer: Doug Fraley

Official Photograph No. 3:

View of the completed backfill covered with straw facing north northeast.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3933 Huntsville Road

Date: May 24, 2013

Photographer: Adam Davis

Official Photograph No. 1:
View of the property before removal activities facing east.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3933 Huntsville Road

Date: May 24, 2013

Photographer: Adam Davis

Official Photograph No. 2:
View of the back side of the property before removal activities facing southwest.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3933 Huntsville Road

Date: June 22, 2015

Photographer: Doug Fraley

Official Photograph No. 3:

View of the excavation activities facing west.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3933 Huntsville Road

Date: June 22, 2015

Photographer: Doug Fraley

Official Photograph No. 4:

View of the excavation activities facing west.



Site: 35th Avenue Superfund Site

Contract: EP-S4-15-01

TDD: 001/OT-01-001

OSC: Rick Jardine

Location: 3933 Huntsville Road

Date: June 22, 2015

Photographer: Doug Fraley

Official Photograph No. 5:

View of the excavation facing west.



APPENDIX E
LOGBOOK NOTES

35th Ave Removal
Phase III
Book 1 of 1



Rite in the Rain®
ALL-WEATHER
**ENVIRONMENTAL
FIELD BOOK**
Nº 550F

PAGE

REFERENCE

DATE _____

Location Birmingham A1 Date 3-16-2015
Project / Client Removal 3rd Ave Phase III

0248-START Day Feeds on Site-

o 836 - Weather: Clear, 52.5°F High

28° W det 0.0 mgh

Humidity 79% Sunrise 0656

Secret B.55. O.O. Rail

24h2

0838-No Renewal today because of

bad weather conditions last

complex weeks. we will be

Catchers or with backfill of

50

emo- START Air mon @ 5pm

OS10 - The Scabbard & Remond Precivota

1000 - STARTED AIRBABLE styling - BAP 11

1031- upwind Staging Area

2.150

TWA: 15.42/m³

max: 35.0 μ m 30053

1044 - David's in care

Case, 15, 4, 5, 3

Time: 23.40/3

max: 42, 20, 13, 20, 4 —

3-16-2015

2

Location Birmingham AL Date 3-16-2015
 Project / Client 38th Ave Renovation Phase III

1324 Damaged Air man —
 Con 8.4 ug/m³
 TWA 15.2 ug/m³
 max 47.2 ug/m³ @ 0504 —
 is upwind Air man Battery route
 after 4 hrs —
 1400 - stop Air sample & Air man stop —
 1435 - start off site —

BSZ

3-16-2015

Location Birmingham AL Date 3-16-2015
 Project / Client 38th Ave Renovation Phase III

0800 - START Day Field on site —
 0830 - Weather: Temp 61.2°F High 80
 Humidity 84% Wind 0.0 in 1st
 24 hrs. Sun up 0655 Sunset 1858
 wind N @ 1 mph —
 0850. NO Renovation site Cleanup and catchup
 today. Pile because of fast
 Bad weather had put Renovation
 behind. —
 1430 - start off site —

BSZ

3-16-2015

Location Birmingham AL Date 3-18-2015
 Project / Client 35th Air Renewal Phase III

0815 - START Day Fley on site —
 0830 - Weather: Temp 55°F High 74°F
 Wind N @ 0 mph. Humidity 73%
 Rainfall 0.0 in last 24 hr
 Sunup 0653 sunset 1827 —
 0850 - sky in air men started —
 0938 - Renewed CV0197 STARTED —
 Air men. started —
 1022 - Air men CV0197 Downed —
 Case: 3.5 y/lw3
 TWA: 10.1 y/lw3
 MAX: 29.7 y/lw3 @ 936 —
 1023 - Air men CV0197 up and —
 Case: 18.9 y/lw3
 TWA: 26.8 y/lw3
 1027 - MAS: 30.8 y/lw3 @ 1006 —
 AT 18" q/s like a swarf
 was going to KRF but ground at
 18" very wet even has crawdads —
 3-18-2015

Location Birmingham AL Date 3-18-2015
 Project / Client 35th Air Renewal Phase III

1037 - UP W ind styling Air men
 Case: 16.7 y/lw3
 TWA: 10.2 y/lw3
 MAX: 22.2 y/lw3 @ 1003 —
 1038 - David styling Air men —
 Case: 70 y/lw3
 TWA: 15.8 y/lw3
 MAX: 33.7 y/lw3 @ 0842 —
 1220 - Downed Air men CV0197
 Case: 9.5 y/lw3
 TWA: 7.5 y/lw3
 MAX: 25.5 y/lw3 @ 0936 —
 1220 - Up and Air men but by fair —
 1229 - KRF - Black. Pb 513 AS - WDI 3
 1229 - KRF - RCHA - Pb 484 I17, AS 429 I16
 1231 KRF CV0197 I16 - Pb 1114 AS 8 I3
 at 18" - Note: SD very wet —
 1340 - stopped Air men. CV0197 —
 1600 - stopped Air men, styling —
 1700 - START 085 site End of Day —
 3-18-2015

Location Birmingham A1 Date 3-11-2015
 Project / Client 35th Ave Renewal Phase III

0700 - START Dog Foley on site
 0730 - weather: Temp 58°F, High 73, Humidity 91% Rainfall 24hrs 12in. Sunrise 0652 sunset 1857 wind N @ 0 mph
 0830 - Air man starting started
 0845 - Air man ~~started~~ CUD 193 started
 0900 - Renewal of CUD's continues
 1000 - Damned Air man starting
 CUD: 75.8 yd³
 TWA: 71.5 yd³
 MAX: 80.9 yd³ @ 0900
 STOPPED Air man, local Rain showers.
 1015 - CUD 193 Air man stopped weather
 * CUD 193 Renewal Completed Buckfill
 CUDs
 1718 - FedEx Defective Distribution Back to EPA End of Day
 3-19-2015

Location Birmingham A1 Date 3-19-2015
 Project / Client 35th Ave Renewal Phase III

0743 - START Dog Foley on site
 0753 - weather: current 55°F High 74°F Humidity 94% wind from NW @ 1 mph
 Sun? 0851 sun down 1858 50-70% chance of Rain
 0756 - Air man. Delayed for better weather conditions. current TWA 10.6 yd³ local showers
 0826 * Renewal of CUD 108A started
 1500 - Renewal of CUD 108A continues
 Buckfill of CUD 108A continues
 1657 - START OF SITE End of Day
 3-19-2015

Location Birmingham A1 Date 3-23-2015
 Project / Client 35th Ave Renewal Phase III

0730 - START Doug Riley on site
 0830 - weather: current Temp 53°F
 High 68°F Low 48°F Rain
 but 44% humidity 63" since 0647
 sunset 1900. Humidity 92%
 current Rain Falling
 0832 - No Renewal / load up out today
 NOA: 1 man, weather
 1448 - Off site for FedEx Run
 1510 - Drop FedEx End of on site Activities
 but not end of Day for GIS work

DS

3-23-2015

Location Birmingham A1 Date 3-24-2015
 Project / Client 35th Ave Renewal Phase III

0746 - START on site
 0800 - weather: current 51°F High 74°F
 Humidity 94% Rain but 24%
 Oh, sunrise 0645 sunset 1901
 wind N Duff
 0827 - Removal 1264 STARTED
 0831 - started Air men stay
 0942 - Downwind Air men stay
 done 2.2 yd³
 TWA 3.6 yd³
 MAX 11.5 yd³ @ 0922
 1000 - upwind Air men stay
 done 5.2 yd³
 TWA 5.5 yd³
 MAX: 20.7 yd³ @ 0835
 Downwind Air men stay
 done 12.6 yd³
 TWA: 17.2 yd³
 MAX: 45.0 yd³ @ 0831

3-24-15

DS

Location Birmingham AL Date 3-24-2015
 Project / Client 35th Ave Removal Phase III

1420 - Air man Downwind CV164

Case: 3.7 ug/l³

TWA: 3.9 ug/l³

Max: 47.8 ug/l³ @ 1327 -

1431 - upwind Air man, stay -

Case: 2.2 ug/l³

TWA: 4.2 ug/l³

Max: 20.3 ug/l³ @ 0835 -

1433 Downwind Air man, stay -

Case: 18.3 ug/l³

TWA: 15.9 ug/l³

Max: 47.0 ug/l³ @ 1403 -

1545 - stop Air man CV1264 -

1600 - stop Air man stay -

1624 - off road water run back -

1705 - off site End of Day -

3-24-2015

By [Signature]

Location Birmingham AL Date 3-25-2015
 Project / Client 35th Ave Removal Phase III

0722 - START Dog Freely on site -

0741 - Weather: Cloudy High 76°F

Humidity 81%, Wind N at 1 mph

Rein last 24 hr Period 01 -

Sunup 0644 Sunset 1902 -

0800 - Air man started stay

0823 - Air man CV0584 started

Removal CV0584 started -

1545 - CV0584 Removal completed

CV0584 Backfill completed

CV0264 Backfill completed

1540 - stop CV0584 stopped CV1130 late

note staying stopped 1540 -

1604 - START TO bottom up for soil back

Down load dirt run later -

1658 - stop off site End of Day -

3-25-2015

By [Signature]

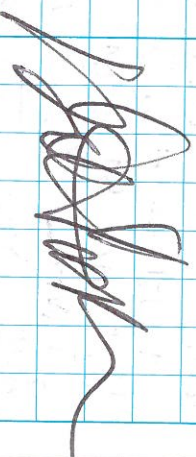
7-APR-15

0715 - Start Tracy DelaRiviere
 onsite. Weather conditions:
 64°F and cloudy forecast
 high is 85°F and partly sunny
 Sunrise 6:26am
 Sunset 7:13pm
 Humidity @ 1030%
 0803 - Set-up downwind staging
 area Data Ram monitoring,
 0816 - Set-up upwind staging
 area Data Ram monitoring,
 0823 - At removal area CVO912A
 0915 - Set-up upwind Data Ram
 at location CVO912A
 0920 - Set-up downwind Data
 Ram at location CVO912A
 1117 - Downwind CVO912A
 Average = 34.8 $\mu\text{g}/\text{m}^3$
 Max Concentration = 64.1 $\mu\text{g}/\text{m}^3$
 1122 - Upwind CVO912A
 Average = 39.5 $\mu\text{g}/\text{m}^3$
 Max Conc. = 77 $\mu\text{g}/\text{m}^3$
 1250 - Downwind staging
 Average Concentration = 38.0 $\mu\text{g}/\text{m}^3$

7-APR-15

Max Concentration = 88.5 $\mu\text{g}/\text{m}^3$
 1254 - Staging Upwind
 Avg. Conc. 22.6 $\mu\text{g}/\text{m}^3$
 Max Conc. 37.4 $\mu\text{g}/\text{m}^3$
 1430 - Excavation complete at
 CVO912A
 1530 - Collect Data Rams
 1600 - Download Data Ram Data
 1620 - Start offsite

7-APR-15



1000 - Start Delta Reintake onsite.
 Weather conditions 75°F
 and Sunny. Forecast high 84°F
 Humidity 70%
 Winds SW at 7 mph.
 Sunrise 6:26 am
 Sunset 7:13 pm
 1030 - Set-up upwind at
~~CV0500A~~ CV0500A
 1040 - Set-up downwind at
 CV0500A
 1045 - Set-up downwind staging
 1050 - Set-up upwind staging
 1200 - Upwind CV0500A
 TWA = 31.9 $\mu\text{g}/\text{m}^3$
 Downwind CV0500A
 TWA = 39.1 $\mu\text{g}/\text{m}^3$
 1210 - Downwind staging
 TWA = 43.0 $\mu\text{g}/\text{m}^3$
 Upwind staging
 TWA = 32.8 $\mu\text{g}/\text{m}^3$
 1340 - Stop Downwind CV0500A
 1343 - Stop Upwind CV0500A
 1345 - Crew begins backfill CV0500A

1503 - Stop Staging downwind
 1509 - Stop staging upwind
 1530 - Downroad data ran data
 1550 - At 909 Village Mill Road
 for Elisa Burks. Resident
 says Elisa Burks does not
 live there.
 1630 - START offsite.

8-APR-15

[Signature]

0730 - START Delafreitie onsite
 weather conditions 66°F Sunny
 Forecast high today 82°F
 Humidity 66%
 Winds South @ 10 mph.
 Sunrise 6:25 am
 Sunset 7:14 pm
 0800 - Set-up downwind staging
 0810 - Set-up upwind staging
 0900 - Take down staging
 Data Remas. No load out or
 digging today.
 0930 - START OFFSITE

9-APR-15

At Delafreitie

0730 ~~START ON SITE~~
 0745 ~~SETUP EXCAVATION IN LOC 312A~~
 0800 ~~SATURATED SOIL CONDITIONS DUE TO~~
~~ORCAVANT RAIN. NO AIR MOUNTING~~
~~EQUIPMENT SET UP. DISCONTINUED~~
 0815 ~~CURRENT STAGE REVISIONS~~
 0830 ~~EXCAVATION APPROVED GRADERS~~
 0845 ~~EXCAVATION APPROVED GRADERS~~
 0900 ~~EXCAVATION APPROVED GRADERS~~
 0915 ~~EXCAVATION APPROVED GRADERS~~
 0930 ~~EXCAVATION APPROVED GRADERS~~

Location Bismarck, ARDate 4/15/15Project / Client 35TH AVE REMOVAL - PHASE III64TH CANNON ~~ROAD~~ ^{TO} W/PAIST

0630 - START ON SITE

0645 - CONC STREET MEETING

0715 - CHECK PREPARE TO CONTINUE

EXCAVATING CVO312A

0745 - TAKEN W/ EPA TR (STADIUM)

REGARDING AIR MONITORING, AIR

CONDITIONS + SATURATED SOILS,

DECE TO DAMP CONDITIONS + ADDITIONAL

RAIN WE ARE MONITORING EXHAUST

SIT UNIT; SATURATED SOILS NO DUST

GENERATED FROM EXCAVATION

0900 - CONN CONTINUES W/ EXCAVATING

CVO312A

1000 - CONN REQUESTED STAMP TO XRF

SAMPLES AREA OF PROPERTY LINE

WHERE GUST MATERIAL EXPOSED;

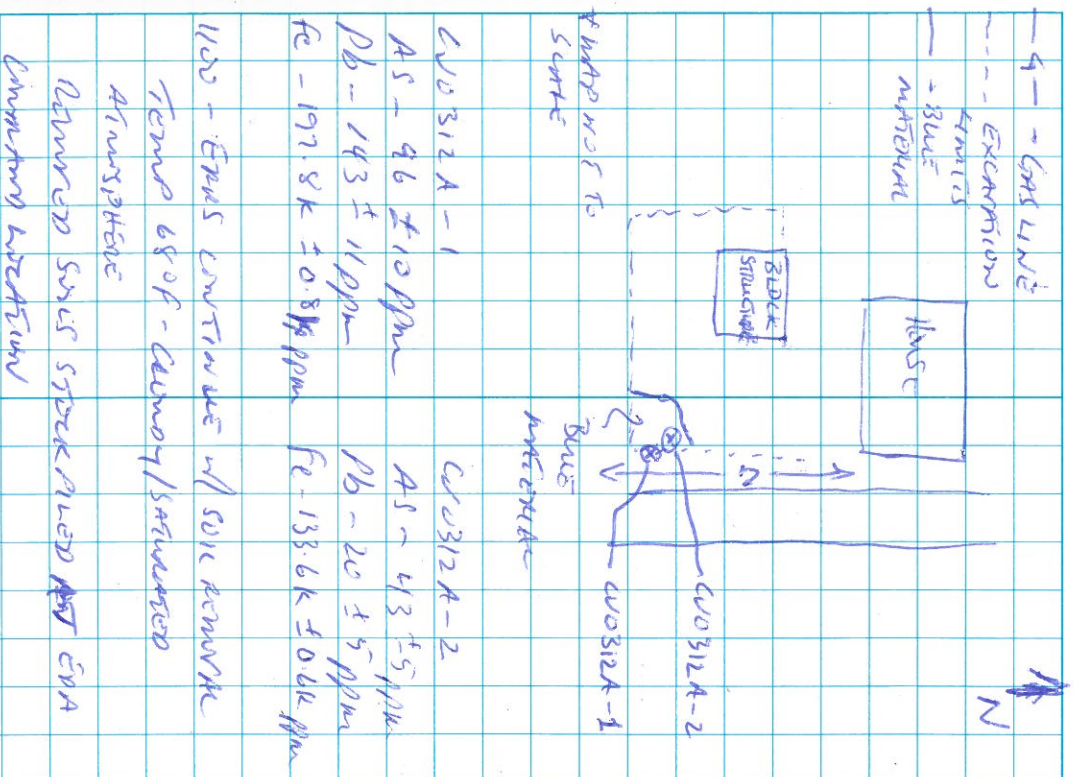
SOIL WAS MULTICENTERS BEYOND PROPERTY

LINE ~~PROPERTY~~ THUS AND ALSO (35TH ST N);

NO FURTHER EXCAVATION W/ ALLOWED

DECE TO EXHAUST WITHIN 5 FT OF EXCAVATION;

MORE OF MATERIAL REMOVED W/ HAND SHOVEL

Location Bismarck, ARDate 4/15/15Project / Client 35TH AVE REMOVAL - PHASE III

Location Birmingham, AL Date 4/15/15
 Project / Client 35TH Ave Renovation - Phase III

1300 - ERAS concrete ~~section~~ ^{top} of EXCAVATION
 of section of Paved City (40312A)
 ERAS prepared to backfill exposed
 Area
 1300 - ERAS continue w/ Backfill + EXCAVATION
 of 40312A
 1330 - ERAS complete 60% of Paved City
 Paved City Renovation
 1345 - START WORK SITE

4/15/15

Location Birmingham, AL Date 4/16/15
 Project / Client 35TH Ave Renovation - Phase III
 65TH F. RAN

0445 - START WORK SITE
 0700 - ERAS + START SPACIFYING
 LAYON W/ILL FINISH 40312A IN
 BETWEEN RAN STREETS
 0830 - ERAS unable to remove Paved City
 Due to RAN
 0900 - CROW Beginning to backfill
 exposed Area (40312A)
 EPA INVOLVEMENT COORDINATION
 NEEDMA ATASHI (404-317-9885)
 DNSITE
 1030 - ERAS continue to backfill
 exposed Area (40312A)
 1045 - Heavy RAN start REMOVAL
 of Daily Activities
 1130 - SEVERE RAN + THUNDERSTORMS
 w/ LITTELLING, ERAS unable to complete
 work on 40312A
 6200 - Heavy RAN
 1600 - START WORK SITE

4/16/15

Location Brownstown, ALDate 4/17/15Project / Client 35th Ave Renovation - Phase III
59th F - Road

0645 - START ON SITE

0700 - EXCAV + START STREET WORK

DUE TO ROAD, NO EXCAVATION, EXCAV

LATER AREA SURROUNDING CURB AND

POST FROM 4/16/15 ROAD

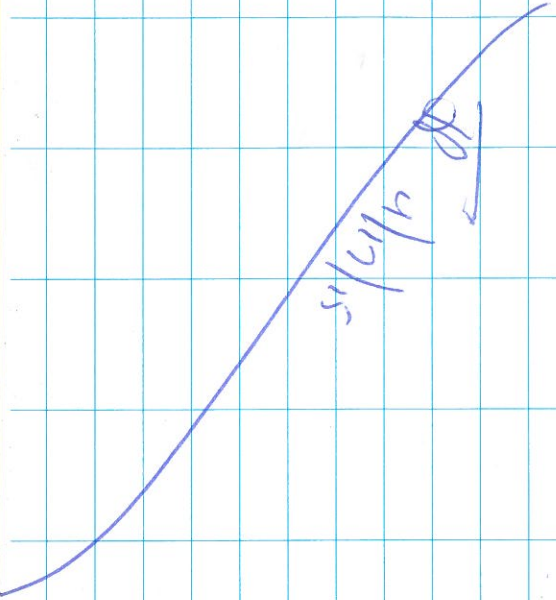
1000 - EXCAV CONTINUES W/ CURB AND ON SITE

START TAKEUP W/ DISC (TANDEM) ~~2~~ 2.000000

FURNISH SITE ACTIVITIES

LIGHT ROAD IN AREA - 600F

1200 - START OFFSITE

Location Brownstown, ALDate 4/20/15Project / Client 35th Ave Renovation - Phase III

1100 - START ON SITE

- DUE TO WEEKEND WORKS TOO LATE

~~TO EXCAVATE~~

1300 - CURB PREPARING PAVEMENT FOR

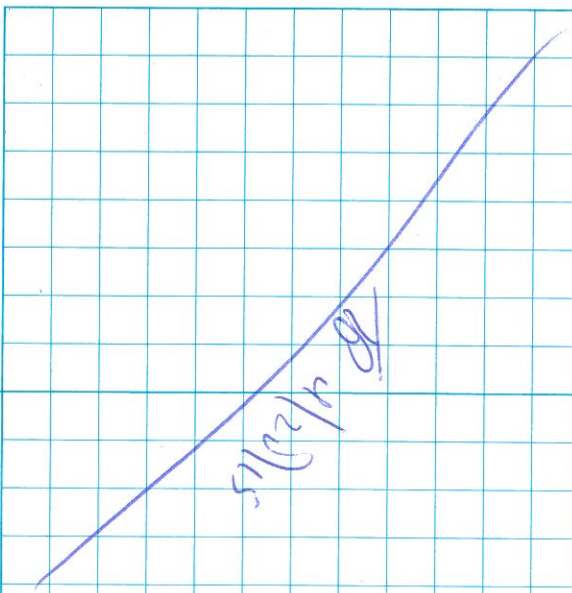
EXCAVATION

1500 - EXCAV CONTINUES BUT PROPERTIES

FOR FUTURE EXCAVATION

1700 - EXCAV CONTINUES W/ PUMP W/ HOLE

1800 - START OFFSITE



Location Brunswick, ALDate 4/21/15Project / Client 38th Air Reserve - Phase III480F - Survey

0645 - START INSITE					
- CHANGE AIR MONITORING					
LOCATION					
0700 - EMMS + START SAFETY MONITORING					
0730 - AIR MONITORING STATION AREA DOWNWIND					
CONC - 9.3 ug/m ³					
LTVA - 12.3 ug/m ³					
0735 - AIR MONITORING STATION AREA UPWIND					
CONC - 10.8 ug/m ³					
LTVA - 12.5 ug/m ³					
0745 AIR MONITORING C0312A DOWNWIND					
CONC - 8.1 ug/m ³					
LTVA - 10.1 ug/m ³					
0750 AIR MONITORING C0312A UPWIND					
CONC - 22.4 ug/m ³					
LTVA - 25.4 ug/m ³					
0800 CREW CONTINUE W/ EXCAVATION					
0850 START ASSIST EPA W/ SAMPLES & KPMAC					
THREAT					
1630 - START COMPLETE SAFETY MONITORING					
THREAT					

Location Brunswick, ALDate 4/21/15Project / Client 38th Air Reserve - Phase III

1645 - AIR MONITORING C0312A DOWNWIND					
CONC - 5.3 ug/m ³					
LTVA - 6.4 ug/m ³					
STARTED					
1651 - AIR MONITORING C0312A UPWIND					
STARTED					
CONC - 13.2 ug/m ³					
LTVA - 15.4 ug/m ³					
1700 - AIR MONITORING STATION AREA					
DOWNWIND STOPPED					
CONC - 4.0 ug/m ³					
LTVA - 7.5 ug/m ³					
1705 - AIR MONITORING STATION AREA					
UPWIND STOPPED					
CONC - 0.4 ug/m ³					
LTVA - 2.6 ug/m ³					
1830 - START OFFSITE					
<div style="text-align: center;">JB 4/21/15</div>					

Location Birmingham, AL Date 4/22/15
 Project / Client 35th Ave Remnant - Phase III
490 f Sunny

0645	START ON SITE		
	START CORRELATE THE MONITORING		
	CONSUMPTION		
0700	START + END SATELLITE		
0850	THE MONITORING STATION AREA DOWNWIND		
	CONC - 4.8 ug/m^3		
	LEAK - 15.9 ug/m^3		
0855	THE MONITORING STATION AREA DOWNWIND		
	CONC - 4.1 ug/m^3		
	LEAK - 6.5 ug/m^3		
0900	ENDS COMPLETE CVD312A BEFORE		
	PROCEEDING TO CVD312B CVD313		
	CVD313-A+B STARTED FOR REMOVAL		
0910	START + END WASTE TO STORAGE		
	REVIEW LEAK FACILITY + CVD31813		
	THE DEPTH STOPPAGE		

Location Birmingham, AL Date 4/22/15
 Project / Client 35th Ave Remnant - Phase III

1130	ENDS BEEN EXAMINING CVD313B		
1230	START BEEN AREA MONITORING		
	CVD313B DOWNWIND		
	CONC - 4.1 ug/m^3		
	LEAK - 9.1 ug/m^3		
1250	BEEN AREA MONITORING CVD313B		
	DOWNWIND		
	CONC - 5.4 ug/m^3		
	LEAK - 12.1 ug/m^3		
1400	ENDS CONTINUE W/ EXAMINING		
	CVD313B, VERY MILD EXCV. NEEDED FOR SIDE WIND		
1510	CVD313B DOWNWIND		
	CONC - 4.4 ug/m^3		
	LEAK - 5.9 ug/m^3		
1515	CVD313B DOWNWIND		
	CONC - 6.0 ug/m^3		
	LEAK - 5.8 ug/m^3		
1645	ENDS BACK TO WORK SIDE WIND UP		
	THROUGH, REMOVAL OVERNIGHT PLANNED		
	CVD313B DOWNWIND STOPPED		
	CONC - 6.2 ug/m^3		
	LEAK - 6.0 ug/m^3		

Location Bismarck, ND Date 4/23/15
 Project / Client 35th Ave Renovation - Phase III

1655 - CUSO₃B monitoring upwind STOPPED
 Conc - 4.0 ug/m³
 LTV_A - 6.0 ug/m³
 1721 - ~~CUSO₃B~~ monitoring STAGNANT AREA
 Downwind STOPPED
 Conc - 10.7 ug/m³
 LTV_A - 8.2 ug/m³
 1730 - ~~downwind~~ STAGNANT AREA
 upwind STOPPED
 Conc - 3.7 ug/m³
 LTV_A - 2.9 ug/m³
 1830 START ~~upwind~~

4/23/15

Location Bismarck, ND Date 4/23/15
 Project / Client 35th Ave Renovation - Phase III
SqF Survey

0645 - START ON SITE, LAB REPORT
~~0700~~ AIR MONITORING DATA TAKEN
 0720 - EPOS + START DAILY MONITORING
 0715 - START DEBRY AIR MONITORING
 Equipment
 0730 - BEGIN DOWNWIND STAGNANT AREA
 Conc - 17.1 ug/m³
 LTV_A - 25.3 ug/m³
 0740 - BEGIN UPWIND STAGNANT AREA
 Conc - 12.4 ug/m³
 LTV_A - 22.8 ug/m³
 0748 - BEGIN CUSO₃B DOWNWIND
 Conc - 15.2 ug/m³
 LTV_A - 24.1 ug/m³
 0755 - BEGIN CUSO₃B UPWIND
 Conc - 20.2 ug/m³
 LTV_A - 27.2 ug/m³
 1000 - EPOS CONTINUES MONITORING
 1045 - START @ CULV114 TO MATHE DATA
 LOCATION

Location Bloomington, ALDate 4/23/15Project / Client 35TH ARE REMARK - PHASE III

1155	AIR MONITORING STOPPED DUE TO	
2400	CV0503B WIND	
	CONC - $7.1 \mu\text{g}/\text{m}^3$	
	LEAD - $9.1 \mu\text{g}/\text{m}^3$	
1205	AIR MONITORING STOPPED DUE TO RAIN	
CV0503B	CONC - $4.9 \mu\text{g}/\text{m}^3$	
	LEAD - $5.8 \mu\text{g}/\text{m}^3$	
1220	AIR MONITORING STOPPED DUE TO RAIN	
	CONC - $6.2 \mu\text{g}/\text{m}^3$	
	LEAD - $11.4 \mu\text{g}/\text{m}^3$	
1230	AIR MONITORING STOPPED DUE TO RAIN	
	CONC - $4.8 \mu\text{g}/\text{m}^3$	
	LEAD - $6.8 \mu\text{g}/\text{m}^3$	
1300	LEAD MONITORING IN THE AREA; NO	
	LEAD MONITORING	
	EXAMINATION CONTINUES	
1600	ENDS CONTINUES W/ EXAMINATION CV0503B	
1800	ENDS COMPLETE EXAMINATION OF	
CV0503B		
1830	START WASTE	
<u>JP 4/23/15</u>		

Location Bloomington, ALDate 4/24/15Project / Client 35TH ARE REMARK - PHASE III42F - CLOUDY

0630	START WASTE	
0700	ENDS + START SAFETY METRIC	
	ENDS W/ MONITORING CV0503A	
	DUE TO WEEKEND RAIN, HOWEVER	
	W/ BATTLE CV0503B	
0900	NO AIR MONITORING; NO EXAMINATION	
	+ STOCKPILE REMAINS W/ MONITORING	
1100	ENDS MONITORING W/ BATTLE	
	CV0503B, W/ MONITORING W/ BATTLE	
1300	ENDS MONITORING BATTLE	
CV0503B		
1500	ENDS CONTINUES W/ BATTLE	
	CV0503B	
	START WASTE	
<u>JP 4/24/15</u>		

Location Dillingham, AKDate 4/29/15Project / Client 35TH Air Reserve - Phase III

0915 - EMMS MEASURE AREA CVO 7938 FOR
EXAMINATION

0930 - START CARBONATE AIR SAMPLE
EQUIPMENT TO CORRECT AIR SAMPLE

~~0930 - EMMS MEASURE AREA CVO 7938 FOR
EXAMINATION~~

0930 - CVO 7938
Pump A01196 - CARBONATED 9.0 L/min

1100 - EMMS CONTINUE MEASUREMENT CVO 7938

1300 - EMMS EXAMINATE CVO 7938

1500 - EMMS EXAMINATE CVO 7938

1600 - DUE TO INDEPENDENT RAIN, START
STAGED AIR MEASUREMENT EQUIPMENT

1615 - 70°F - LIGHT RAIN, AIR SAMPLE MEASUREMENT
CONE - 8.2 ug/m³

1620 - AIR MEASUREMENT CVO 7938 EQUIPMENT
STAGED

CONE - 6.8 ug/m³

LEAK - 12.4 ug/m³

Location Dillingham, AKDate 4/29/15Project / Client 35TH Air Reserve - Phase III

1720 - AIR MEASUREMENT STATION AREA
CVO 1100 STOPPED

CONE - 12.1 ug/m³

LEAK - 11.2 ug/m³

1725 - AIR MEASUREMENT STATION AREA
DOWNWIND STOPPED

CONE - 8.9 ug/m³

LEAK - 6.2 ug/m³

1730 - START MEASURE AIR SAMPLE
START: 0930 - 570 - 1600 = 390 mins

Flow - 9.0 L/min

TOTAL FLOW - 3510 L

4/27/15 - CVO 7938 - 80012

1800 - EMMS CONDUCTING DRY ACTIVITIES

1830 - START DRY ACTIVITIES

TP
4/27/15

Location Birmingham, AL Date 4/29/15
 Project / Client 35TH AVE REMEDIAL - PHASE III
550F - 2A10

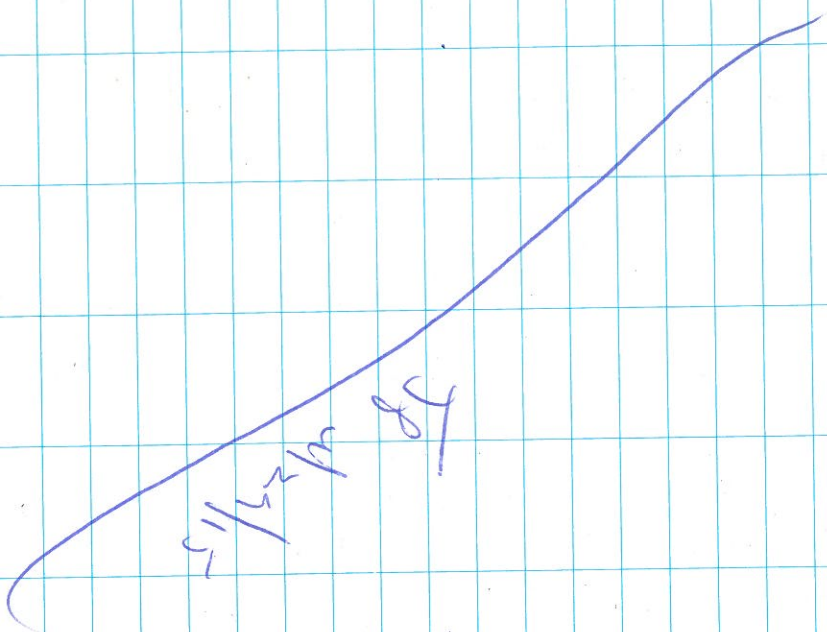
0645	START INSITE				
	DUE TO RAINY CONDITIONS NO AIR				
	MONITORING; IF RAIN MOVES OUT				
	START WHEN SETUP AND MONITORING				
	STATIONS				
0700	START + CHAS STREET + OTHER STATION				
0715	CHAS MOVED TO COMPLETE C107933				
0805	START DELBY AIR MONITORING STATIONS				
	56F - Survey				
	RAN MOVED OUT				
	DATA RANS CALIBRATED				
0805	STARTING AREA WIND				
	CONC - 21.5 $\mu\text{g}/\text{m}^3$				
	LTWA - 22.5 $\mu\text{g}/\text{m}^3$				
0915	STARTING AREA DOWNWIND				
	CONC - 12.4 $\mu\text{g}/\text{m}^3$				
	LTWA - 14.1 $\mu\text{g}/\text{m}^3$				
1030	CHAS MUST COMPLETE W/ EXCAVATION				
	OF C107933				
1115	CHAS COMPLETE EXCAVATION OF C107933				
1145	CHAS WORKING ON FENCE TO COMPLETE				
	PROGRAMMING & MONITORING STATION				

Project / Client 35TH AVE REMEDIAL - PHASE III

1300	CHAS BEGIN EXCAVATION ON C11114A				
1345	CHAS BEGIN AIR MONITORING WIND				
	STARTED				
	CONC - 16.0 $\mu\text{g}/\text{m}^3$				
	LTWA - 17.7 $\mu\text{g}/\text{m}^3$				
1350	C11114A DOWNWIND AIR MONITORING				
	STARTED				
	CONC - 12.3 $\mu\text{g}/\text{m}^3$				
	LTWA - 12.6 $\mu\text{g}/\text{m}^3$				
1520	CHAS COMPLETE C11114A - 6" CUT				
	C11114A WIND AND MONITORING				
	STOPPED				
	CONC - 8.8 $\mu\text{g}/\text{m}^3$				
	LTWA - 10.1 $\mu\text{g}/\text{m}^3$				
1530	C11114A DOWNWIND STOPPED				
	CONC - 13.7 $\mu\text{g}/\text{m}^3$				
	LTWA - 16.6 $\mu\text{g}/\text{m}^3$				
1545	CHAS STARTING EXCAVATION STOPPED AND MONITORING				
	CONC - 16.0 $\mu\text{g}/\text{m}^3$				
	LTWA - 19.3 $\mu\text{g}/\text{m}^3$				
1550	STARTING AREA DOWNWIND STOPPED				
	CONC - 9.4 $\mu\text{g}/\text{m}^3$				
	LTWA - 14.4 $\mu\text{g}/\text{m}^3$				

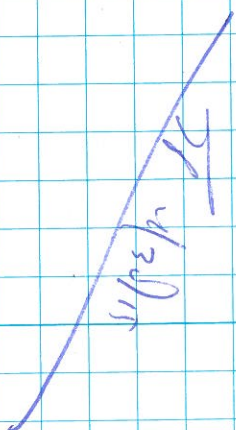
Location Brimmington, AK Date 4/29/15
 Project / Client 35th AVE Removal - Phase III

1630 - START DEM MOORING AX WITH WIND
 POST
 1730 - ENDS COMPLETE WITH A BREAK
 1745 - START OFFSITE



Location Brimmington, AK Date 4/30/15
 Project / Client 35th AVE Removal - Phase III
 50th - Sunny

0630 - START ON SITE
 0700 - CHAS + START STAFFS + UPS
 BLUENING
 NO EX DEMOLITION TODAY DUE TO
 NO RESIDENTIAL SPRINKLER SO ENDS
 W/ABOVE TO DIG AND RESIDENCES CURRENTLY
 ENDS WILL BE CARRYING LOTS
 0900 - START WORKING ON MATERIALS ADDITIONAL
 PAINTERIES
 1100 - ENDS WORKING ON MATERIALS CLOSING
 1300 - ENDS COMPLETE MATERIALS ON CLOSING
 * START + ENDS DISCUSSED REMOVAL
 FROM FENCE TO FENCE OF PROPERTY
 CLOSING
 1500 - ENDS COMPLETE MATERIALS CLOSING
 1700 - ENDS COMPLETE MATERIALS
 OPERATIONS CLOSING
 START OFFSITE



Location Birmingham, AL Date 5/1/15
 Project / Client 35th Ave Renovation - Phase III
50°F Sunny

0645	START ON SITE		
0700	ERAS + START SAFETY + OPS BACKLOG		
	ERAS TO SOD SEVERAL YARDS + REPAVE		
	PLANTS		
	CONCRETE CURBLINE OF CUS23A		
0900	ERAS CONTINUE CURBLINE CUS23A		
1100	ERAS BACKFILL CUS23A		
	BEGIN TO EXTRACT CUS23A		
1130	START BEGIN AIR MONITORING CUS23A		
	DRAINING		
	CONC - 4.5 ug/m^3		
	LEAD - 4.4 ug/m^3		
1152	START CUS23A WIND DATA RAIN		
	CONC - 17.7 ug/m^3		
	LEAD - 21.9 ug/m^3		
1300	STOVE PIT UNCOVERED, AIR MONITORING		
1344	STOVE AREA WIND		
	CONC - 7.3 ug/m^3		
	LEAD - 11.2 ug/m^3		
1354	STOVE AREA DRAINING		
	CONC - 12.1 ug/m^3		
	LEAD - 24.3 ug/m^3		
	<u>70°F Sunny</u>		

1530	ERAS CONTINUE OPERATING		
	CUS23A		
1615	ERAS CONTINUE OPERATING		
	CUS23A		
1620	CUS23A WIND STOPPED		
	CONC - 10.6 ug/m^3		
	LEAD - 14.4 ug/m^3		
1630	CUS23A DRAINING STOPPED		
	CONC - 4.4 ug/m^3		
	LEAD - 6.1 ug/m^3		
1635	STOVE AREA WIND STOPPED		
	CONC - 3.3 ug/m^3		
	LEAD - 4.4 ug/m^3		
1640	STOVE AREA DRAINING STOPPED		
	CONC - 9.4 ug/m^3		
	LEAD - 10.3 ug/m^3		
1730	START DRAINING ARE DATA		
	FICES		
1745	START OFFSITE		
	<u>78°F Sunny</u>		

4-MAY-15

1300 - START DeLaReintre
onsite.

1320 - Place Data Ram at

downwind Staging area location

1330 - Place Data Ram at

upwind Staging location

1340 - Place upwind Data Ram

at CV0305B

1350 - Place downwind Data Ram

at CV0305B.

1400 - Current weather conditions

830 F Partly Sunny

Winds ENE at 5 mph

Humidity @ 35%

1445 - Upwind Staging area

Conc: 0.0 $\mu\text{g}/\text{m}^3$

TWA: 7.1 $\mu\text{g}/\text{m}^3$

1450 - Downwind Staging area

Conc: 18.9 $\mu\text{g}/\text{m}^3$

TWA: 12.3 $\mu\text{g}/\text{m}^3$

1500 - Upwind CV0305B

Conc: 15.5 $\mu\text{g}/\text{m}^3$

TWA: 18.0 $\mu\text{g}/\text{m}^3$

4-MAY-15

1501 - Downwind CV0305B

Conc. - 8.6 $\mu\text{g}/\text{m}^3$

TWA - 9.7 $\mu\text{g}/\text{m}^3$

1700 - Shut down Data Ram

Downwind Staging

1705 - Shut down Data Ram

Upwind Staging

1710 - Shut down CV0305B

Upwind

1715 - Shut down CV0305B

Downwind

1730 - Download Data Ram data

1800 - START OFFSITE

4-MAY-15



Location _____

Date 5-MAY-15

Project / Client _____

0730 - START Pelate Reintre onsite
Perform Zero Calibration on
all Data Rams

Weather Conditions: 64°F
Forecast high = 83°F

Humidity = 52%

Winds ENE at 8 mph

0750 - Deploy Data Ram at
downwind staging area location

0800 - Deploy Data Ram at
downwind staging area location

0810 - Deploy Data Ram at
downwind staging area location

Downwind C10305B location

0815 - Deploy Data Ram at
downwind staging area location

1017 - Downwind Staging Area

Conc: 14.1 $\mu\text{g}/\text{m}^3$

LTWA: 19.1 $\mu\text{g}/\text{m}^3$

1021 - Upwind Staging Area

Conc: 14.0 $\mu\text{g}/\text{m}^3$

LTWA: 8.5 $\mu\text{g}/\text{m}^3$

1026 - Excavation activities

continue at location C10305B

87

Location _____

Date 5-MAY-15

Project / Client _____

1027 - Downwind C10305B

Conc: 8.4 $\mu\text{g}/\text{m}^3$

LTWA: 14.5 $\mu\text{g}/\text{m}^3$

1030 - Upwind C10305B

Conc: 10.1 $\mu\text{g}/\text{m}^3$

LTWA: 13.0 $\mu\text{g}/\text{m}^3$

1615 - Excavation complete @ C10305B

Downwind C10305B Data Ram

stopped. Conc = 11.7 $\mu\text{g}/\text{m}^3$

LTWA = 11.9 $\mu\text{g}/\text{m}^3$

1617 - Upwind C10305B stopped

Conc = 10.6 $\mu\text{g}/\text{m}^3$

LTWA = 10.3 $\mu\text{g}/\text{m}^3$

1631 - Crew begins backfill at
C10305B

1635 - Stop Data Ram at Downwind Staging

Conc = 21.8 $\mu\text{g}/\text{m}^3$

LTWA = 16.9 $\mu\text{g}/\text{m}^3$

1637 - Stop Data Ram at Upwind Staging

Conc = 7.3 $\mu\text{g}/\text{m}^3$

LTWA = 5.7 $\mu\text{g}/\text{m}^3$

1700 - Download Data Ram data

1730 - START offsite

87

6-MAY-15

0730 - START Pelokointine lasire
Weather conditions: 62°F

Forecast high 84°F

Humidity = 52% 3

Winds NNE at 7 mph.

Perform zero calibration of
Data Rams

0800 - Deploy downwind staging area
Data Ram

Conc: 25.6 $\mu\text{g}/\text{m}^3$

LTWA: 24.5 $\mu\text{g}/\text{m}^3$

0805 - Deploy upwind staging area
Data Ram

Conc: 14.1 $\mu\text{g}/\text{m}^3$

LTWA: 13.7 $\mu\text{g}/\text{m}^3$

0815 - Arrive at excavation FMOZISB

0830 - Deploy downwind FMOZISB

Conc: 15.8 $\mu\text{g}/\text{m}^3$

LTWA: 22.7 $\mu\text{g}/\text{m}^3$

0840 - Deploy upwind FMOZISB

Conc: 19.0 $\mu\text{g}/\text{m}^3$

LTWA: 20.7 $\mu\text{g}/\text{m}^3$

0845 - EPRS begins excavation
at FMOZISB location.

6-MAY-15

1700 - Stop downwind staging Data Ram

Conc: 20.1 $\mu\text{g}/\text{m}^3$

LTWA: 15.1 $\mu\text{g}/\text{m}^3$

1705 - Stop upwind staging Data Ram

Conc: 8.3 $\mu\text{g}/\text{m}^3$

LTWA: 6.1 $\mu\text{g}/\text{m}^3$

1720 - Stop downwind FMOZISB

Conc: 14.1 $\mu\text{g}/\text{m}^3$

LTWA: 12.9 $\mu\text{g}/\text{m}^3$

1723 - Stop upwind FMOZISB

Conc: 19.7 $\mu\text{g}/\text{m}^3$

LTWA: 12.3 $\mu\text{g}/\text{m}^3$

1740 - Download data

1800 - START of SITE

6-MAY-15

[Signature]

7-MAY-15

0745- START Delacretite onsite

Weather conditions: 60°F

Forecast High: 87°F

Humidity: 60%

Winds ESE at 4 mph

Perform zero calibration on

Data Ramer.

0800- No excavation activities

this morning. Clearing lots

in preparation for excavation.

Also backfill and restoration

of completed lots.

Also there is no load-out of

stockpile material today.

Stockpile is covered.

0910- rainload site photos

1300- Crew is beginning excavation

at Carver High School

Set-up downwind Staging Data Ram

Cmc: 20.7 $\mu\text{g}/\text{m}^3$ LTWA: 31.6 $\mu\text{g}/\text{m}^3$

1320- Deploy upwind Staging Data Ram

Cmc: 4.2 $\mu\text{g}/\text{m}^3$ LTWA: 7.0 $\mu\text{g}/\text{m}^3$

7-MAY-15

1335- Deploy Upwind - Carver

Cmc: ~~12.0~~ ~~11.5~~ ~~11.0~~ 7.2 $\mu\text{g}/\text{m}^3$ LTWA: ~~31.6~~ ~~29.1~~ ~~27.6~~ 8.7 $\mu\text{g}/\text{m}^3$

1337- Deploy downwind - Carver

Cmc: 5.6 $\mu\text{g}/\text{m}^3$ LTWA: 8.8 $\mu\text{g}/\text{m}^3$

Backnote - Carver High ID is:

CV0511A

1700- Stop Upwind CV0511A

Cmc: 9.6 $\mu\text{g}/\text{m}^3$ LTWA: 11.5 $\mu\text{g}/\text{m}^3$

1703- Stop Downwind CV0511A

Cmc: 6.0 $\mu\text{g}/\text{m}^3$ LTWA: 6.5 $\mu\text{g}/\text{m}^3$

1710- Stop Upwind Staging

Cmc: 9.6 $\mu\text{g}/\text{m}^3$ LTWA: 5.7 $\mu\text{g}/\text{m}^3$

1712- Stop downwind Staging

Cmc: 40.5 $\mu\text{g}/\text{m}^3$ LTWA: 22.6 $\mu\text{g}/\text{m}^3$

1720- Download data

1745- START onsite

7-MAY-15

CPE/SH

8-MAY-15

0730 - START DelaReintre
 onsite. ————
 weather conditions: 62°F
 forecast High = 89°F ————
 Humidity = 44% ————
 wind SW at 4 mph ————
 perform zero calibration on
 data vans ————
 run will generate at CUD162A
 0800 - Deploy Downwind Staging
 Conc: 39.5 $\mu\text{g}/\text{m}^3$
 LTWA: 33.3 $\mu\text{g}/\text{m}^3$
 0806 - Deploy Upwind Staging
 Conc: 28.5 $\mu\text{g}/\text{m}^3$
 LTWA: 28.1 $\mu\text{g}/\text{m}^3$
 0830 - Deploy Upwind CUD162A
 Conc: 33.3 $\mu\text{g}/\text{m}^3$
 LTWA: 33.6 $\mu\text{g}/\text{m}^3$
 0838 - Deploy downwind CUD162A
 Conc: 27.9 $\mu\text{g}/\text{m}^3$
 LTWA: 33.6 $\mu\text{g}/\text{m}^3$
 1130 - STOP upwind CUD162A
 Conc: 13.4 $\mu\text{g}/\text{m}^3$
 LTWA: 21.2 $\mu\text{g}/\text{m}^3$

8-MAY-15

1134 - STOP downwind CUD162A
 Conc: 18.5 $\mu\text{g}/\text{m}^3$
 LTWA: 19.0 $\mu\text{g}/\text{m}^3$
 1152 - Stop Upwind Staging
 Conc: 66.1 $\mu\text{g}/\text{m}^3$
 LTWA: 17.1 $\mu\text{g}/\text{m}^3$
 1154 - Stop downwind Staging
 Conc: 24.1 $\mu\text{g}/\text{m}^3$
 LTWA: 32.3 $\mu\text{g}/\text{m}^3$
 1200 - Download data
 1230 - START offsite

8-MAY-15

S. M. O'Neil

Location Bismarck AL Date 5-11-2015
 Project / Client 35th Ave Renewal

0800-START Dog Foley on site

Begin Zero Duff Rain

Weather: Temp 76.8°F High 90°F

Low 63°F. Humidity 61% Sun up

0549 Sun up 1937, 0 in Rain fell

Lat 24hr Period.

0940. Upwind STAGY Air men started

0950. Downwind STAGY Air men started,

1000 CVOID 1A. Renewal started & Renewal

Shed from back yard

1540 STAGY upwind

care. 5.8 g/LB

Duff 1.4 g/LB

max 23.8 g/LB @ 1418

1541 STOP STAGY upwind Air men

1542 Downwind STAGY Air men

care. 4.0 g/LB

Duff 2.6 g/LB

max 17.6 g/LB @ 945

1543-STOP Air men Downwind

1630-START off site End of Day

5-11-2015

AL

Location Bismarck AL Date 5-12-2015
 Project / Client 35th Ave Renewal

0745-START Dog Foley on site

Weather: 73.0°F High 82.0°F

Low 59°F Rain 0.0 Lat 24hr

Period. Humidity 78%. Sun up

Rain Shows South of Bismarck

AL.

0830-STARTED upwind/Downwind STAGY

0840-Renewal CVOID 1A, B start times

Set up upwind/Downwind STAGY

CVOID 104

0900-Informed care of very

Dry weather conditions

suggest workers to keep down

Dust

1002-Downwind CVOID 104

Care 32.5 g/LB

Duff 4.5 g/LB

max 42.5 g/LB @ 854

1003 Upwind CVOID 104

Care 20.0 g/LB

Duff 14.6 g/LB

max 41.3 g/LB

Polyp shows 5-bp Air men

CVOID 104

Location Birmingham A1 Date 5-12-2015
 Project / Client 35th Ave Removal

1017 - ca 14.7 g/L³
 TWA 16.8 g/L³
 MAX 21.5 g/L³
 Upwind staying Air Mon
 1017 - Demerol staying Air Mon
 CUE: 19.6 g/L³
 TWA: 21.2 g/L³
 MAX: 28.1 g/L³ @ 0927 -
 1018 - STAGING Air Mon stopped.
 Pop up Showers in area
 1600 - CVO1044 - Removal / Backfill
 completed Removal of CVO1044
 started
 1630 - off load Data Rem Distrib
 1702 - START off side End of Day

5-12-2015

PS

Location Birmingham A1 Date 5-13-2015
 Project / Client 35th Ave Removal

0130 - START on site
 0149 - weather: 64°F with high today at
 82°F Humidity 65%. No rain fall
 Post 24hr. Sample 06548 at sunset
 1939.
 0251 - Zero Data Rems Removal of
 CVO1044 continues
 0925 - STAGED Air Mon staying area
 1554 - many staying Demerol
 CUE: 1.8 g/L³
 TWA 2.6 g/L³
 MAX 14.7 g/L³ @ 0309
 1555 - Demerol staying Area
 CUE: 12.7 g/L³
 TWA: 10.7 g/L³
 MAX: 36.2 g/L³ @ 1314
 1621 - Like Data CVO1044 & removed
 & Backfilled
 1630 - off load Data Rem Distrib
 1703 - START off side End of Day

5-13-2015

PS

Location Birmingham AL Date 5-14-2015
 Project / Client 35th Ave Removal

0730 - START Doug Feeley on site. —

weather: 85°F High 87 low 67

wind N at 4 mph Humidity 61%

0 in Rain Fall Past 24 hr, —

Sun 0547 sunset 0940 —

0815 - Air man at staging Area —

Started, —

0835 upwind Air man staging —

Cond: 0.0 y/l/3

TWA: 0.2 y/l/3

MAC: 3.8 y/l/3 @ 0815 —

0936 - Downwind Air man staging —

Cond: 14.1 y/l/3

TWA: 16.6 y/l/3

MAC: 43.0 y/l/3 @ 0933 —

1312 upwind Air man staging —

Cond: 0.0 y/l/3

TWA: 0.1 y/l/3

MAC: 10.2 y/l/3 @ 1015 —

1510 STOPPED Air man staging —

1700 - START off site End of Day —

5-14-2015

Big 2

Location Birmingham AL Date 5-15-2015
 Project / Client 35th Ave Removal

0800 - START Doug Feeley on site —

0834 - weather: 72°F High 84°F

low 63°F Sun 0546 sunset

1940 Humidity 33% No Air

monitors until weather improves

because of local isotope pop up

Shovess —

0835 - Shippin out Dirty Dirt today —

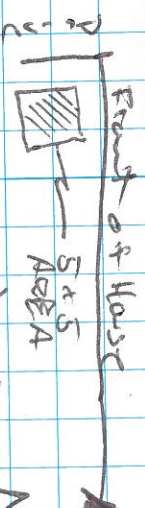
& Removal of CUD0823A started

1018 CUD0823A Removal area has clay

Coal Tar Patch 5x5 instructed

CRAS to dig 4th clean not

past 24"



1303 - CUD0823B started) Note Note

& land out center area. —

1600 - START of SS to be used as —

off to feed Ex for mapping —

1645 - Mapping at Field End of

STARTS Day —

Big 2 5/15/2015

Location Birmingham AL Date 5-18-2015
 Project / Client 35th Ave Renovation

- 0800 - START Day Early on site -
 0930 - local Interstate Pop up shows
 no POST monitors waiting
 for better weather conditions
 1427 - Late Note Removal of C10823B
 Continued -
 1600 - Backfill of C10823 AB
 completed -
 1630 - marked C10045B for Removal
 1705 - START off site -

D3

5-19-2015

Location Birmingham AL Date 5-19-2015
 Project / Client 35th Ave Renovation

- 0800 - start Day Early on site
 Begin testing of Debris
 weather: Temp 25.2°F wind
 NE 3 mph high Temp 86°F low
 64°F Humidity 86%. Rainfall
 1.21 24hrs 0.01 in Sun 0544
 Sunset 1843 -
 0900 - Removal C10045B started.
 0920 - START A/C mon sty's area
 1633 - UP wind sty's A/C mon
 CAC 5.6 3/13
 Turb 10.6 3/13
 MAX 16.5 3/13 @ 0850 -
 1057 - Pen wind A/C mon sty's
 CAC 13.3 3/13
 Turb 15.3 3/13
 MAX 28.5 3/13 @ 0948
 1100 - STARTED Sty'm. Gap 12 A/C
 Sep 4 -
 1100 - STARTED A/C mon C10045B
 1128 - Upwind C10045 Air mon. After
 failed.

5-19-2015

Location Birmingham A1 Date 5-19-2015
 Project / Client 35th Ave Renovation

1239 - STOP Air men staying

Pop up showers

1300 - stopped Air men at cross

Pop up showers

1630 - off set to deep sample staying
 Bal 12 sample that was stopped

Collected at 1500

1709 - Drop FedEx soft End of Day

~~BB~~

15/19/2015

Location Birmingham A1 Date 5-20-2015
 Project / Client 35th Ave Renovation

0800 - START Day Reley on site weather

Current temp 76.5°F w. High

at 85°F Humidity 72% Rainfall

last 24 hrs 0.01 or less Sunrise

today 0543 Sunset 1944

0835 - End Data Run

1010 - Note note: Air monitoring at

CV 0045 B & stay's area's stable

CV 0045 B - Bal 01 air sample

started at 1000

1012 - Pumping Air men CV 0045 B

conc: 209 ug/L³

TWA: 20.6 ug/L³

MAX 28.8 ug/L³ @ 12

upwind Detekum maintaining

1124 - Drawing Air men CV 0045 B

conc: 6.7 ug/L³

TWA: 1.50 ug/L³

MAX: 28.9 ug/L³ @ 0512

1311 - upwind @ staying Air men

conc: 2.1 ug/L³

TWA: 7.6 ug/L³

MAX: 58.4 ug/L³ @ 1131

Location Birmingham, AL Date 5/20/2015
 Project / Client 35th Ave Removal
860 P/13/13

1316 - Damaged & staying over
 Case: 152 gals
 Trucks 11, 3 gals
 MAX 45.8 gals @ 0926 —
 1326 - CVO 45B Air man.
 Dam wing
 Conc 158 gals
 TWA 12.1 gals
 MME 28.5 gals @ 0942 —
 1345 - stopped air man from staying
 Round of CVO 045B tankards,
 Backfill started at CVO 45B —
 Isolated showers in area of
 1400 - Air such CVO 45B - Backfill stopped
 Air man from CVO 45B stopped —
 1548 - Prep truck did sample for shipment
 Cleanup and equipment cleanup
 make ready for demolition to be done from
 5/20/2015 - 5/21/2015 —
 1640 - off site dropping FDX sample
 1714 - Drop FDX EK End of Day
 5/20/2015 Day 1

Location Birmingham, AL Date 5/22/15 65
 Project / Client 35th Ave Removal

0733 START - R. Stubbs on site.
 0740 Weather: 69°F + cloudy
 humidity 87% with a 1 mph
 wind out of east.
 0745 Spoke to EPA - Jarline + CHC
 Down about game plan.
 0815 Zered Detarans
 0845 started run on downwind
 Detarans at staging.
 0945 CHC at 3436 30th Way N.
 continuing backfill. CVO 45B
 moving and used tracking at
 0955 staging area.
 1430 At 3339 33rd Place North
 and CHC is grubbing/prepping
 back yard for removal.
 Have to cut down a pecan
 tree. CVO 401B
 1450 CVO 401B - CHC removed
 shed from backyard. If
 was moved to staging at
 the Carver School.
 1551 Stopped Detarans at Staging.
 5/22/15

Location Birmingham, AL Date 5/27/15
 Project / Client 35th Ave Removal

1655 Downloading DataRam data.

- Staging download
- Avg Mass = 23.5 mg/m³
- Max Mass = 59.7 mg/m³
- Staging upwind
- Avg Mass = 8.4 mg/m³
- Max Mass = 14.4 mg/m³

1635 End of day.

[Signature]
 5/27/15

Location Birmingham, AL Date 5/28/15
 Project / Client 35th Ave Removal

0710 START - Studs arrived at

Command Post. CMC having tailgate meeting.

Weather: 67°F 97% humidity + east wind at 4 mph. High of 83°F expected with thunderstorms forecasted starting at 11am. 0.7 inches of rain.

0730 Fell yesterday.
 Zeroing DataRam units.

0832 All units normal.
 Started run on staging area datarams.

0838 At C0401B CMC setting up to continue cutting

tree down in back yard

0930 Stopped run on datarams at staging due to moderate

rainfall. CMC standing down at C0401 from tree cutting.

0950 At C0401 CMC resuming tree cutting as rain has stopped.

[Signature] 5/28/15

Location Birmingham, AL Date 5/28/15
 Project / Client 35th Ave Removal

1320 At CVO401, tree is done CNC
 setting up to grind stump in
 backyard. RS

1435

Heavy rain moving in.

*Late note - backfilling completed
 yesterday at CVO401B.
 1555 Demolishing today's Retrans
 data. RS

- Downwind staging

- Avg mass = 35.7 kg/m^3

- Max mass = 360 kg/m^3

- Upwind staging

- Avg mass = 12.1 kg/m^3

- Max mass = 22.6 kg/m^3

- Short runs today due to
 rain.

1615 ~~End of day~~

~~5/28/15~~

Location Birmingham, AL Date 5/29/15
 Project / Client 35th Ave Removal

0800 START - Stubs at the
 command Post.

Weather: 69°F, cloudy, 90%

humidity, wind NE at 4 mph.

High of 84°F + 40% chance

of storms. Per rain gauge

at staging 1.75 inches of

rain before leaving yesterday,

0815 Spoke to CNC - PM Downy.

Due to over 2" rainfall

yesterday no excavation today

or tomorrow. They will

continue to grind the stump

at CVO401B. They will also

cut trees down in prep

at the church at CVO254.

No air monitoring today.

0845 At CVO401B CNC grinding

stump. RS

1230 Put away all tripods,

enclosures for Retrans in

site trailer. RS

1300 Demolished RS

1600 Arrived in Marietta, GA RS

End of day.

Location Birmingham A1 Date 6/1/2015
 Project / Client 35th Ave Removal

0745-

START-Day Ficky on site weather
 current temp 68°F with a high
 of 80°F. 60% chance of Rain
 Humidity at 91%. Rain fell
 last 24 hrs 0.36 in. Wind N
 up to 4 mph. Sky is overcast
 Begin to assemble dust
 monitors equipment in preparation
 will wait for better weather
 conditions to deploy DataRens

0800 -

START up wind DataRens

0906 -

start Damward cluster Rens

0928 -

CVO4D18 Removal started

1030 -

opened Air DataRens staying

Cave 21.8 ug/m³

TWA 30.8 ug/m³

max 65.0 ug/m³ @ 0905

1032

Damward Air DataRens staying

Cave 5.6 ug/m³

TWA 9.3 ug/m³

max 10.3 ug/m³ @ 0909

6/1/2015

Day Ficky

Location Birmingham A1 Date 6/1/2015
 Project / Client 35th Ave Removal

1040 - STOP DataRens because

of Pop up shears. Did not
 start air monitoring at CVO4D18
 because of weather.

1300 - Removal of CVO4D18 continues

1700 - START off site End of Day

1700 note note second Rens at 0800

Day Ficky

6/1/2015

Location Birmingham AL Date 6/2/2015
 Project / Client 35th Ave Removal

- 0715 - START on site Day Friday
 0800 - Erod Data Run
 0901 - START Data Run at shoring
 0930 - HP 0125A Removal started,
 Data Run display up and
 Data Run malfunction
 1104 - HP 0125A Removal Data Run
 Conc: 13.2 ug/l³
 Turb: 17.6 ug/l³
 MAX: 50.5 ug/l³ @ 1104 — E
 1252 - up and shoring area
 Conc: 3.3 ug/l³
 Turb: 130 ug/l³
 MAX: 76.3 ug/l³ @ 0850
 1252 - Down and shoring area
 Conc: 11.0 ug/l³
 Turb: 231 ug/l³
 MAX: 75.9 ug/l³ @ 0849 — E
 1335 - Removal of HP 0125A completed
 Backfill begins at HP 0125A

6/2/2015

D. J. F.

Birmingham AL Date 6/2/2015
 Project / Client 35th Ave Removal

- 1430 - Removal of C10401B continues
 1550 - up and shoring area
 Conc: 3.5 ug/l³
 Turb: 9.3 ug/l³
 MAX: 76.3 ug/l³ @ 8:50 ug
 1554 - Down and shoring area
 Conc: 23.2 ug/l³
 Turb: 19.3 ug/l³
 MAX: 75.9 ug/l³ @ 0849
 STOP Air mbr shoring
 1646 - note note Backfill 11 110125A
 completed. Data Run Data
 Down and completed
 1701 - START off site End of Day

6/2/2015

D. J. F.

Location Birmingham A1 Date 6/3/2015
 Project / Client 35th Ave Renovation

0700 - START Doug Fidey on site
 weather: Temp 67°F wind N 2 mph
 High 85°F Sun up 0537 sunset
 1953 .01 Rain Fall last 24 hrs.

0710 - Begin Zero Data Pass — e

0813 - START Air Mon Skagging — e
 start Air Mon AV 040130 — e

1037 - skagging crew up wind Air Mon
 crew 0.0 y/lw3
 TWA 0.1 y/lw3

1038 - MAX 1.6 y/lw3 @ 0818 — e
 skagging crew Down wind Air Mon
 crew 18.9 y/lw3
 TWA 23.1 y/lw3
 MAX 31.0 y/lw3 @ 0849 — e

1045 CV 04013 Air Mon Downwind
 Crew 19.5 y/lw3
 TWA 13.2 y/lw3

1049 - MAX 24.2 y/lw3 @ 0850
 CV 04013 Air Mon upwind,
 Crew 18.3 y/lw3
 TWA 23.6 y/lw3
 MAX 30.4 y/lw3 @ 0907

PS 7th 6/3/2015 —

Birmingham A1

Date 6/3/2015

Project / Client 35th Ave Renovation

1520 - Back Fill on CV 04018 started
 24in Round and Crushed — e
 1615 - Download Backfill Run after —
 1701 - START 045 Site Road off Day

0528

6/3/2015

Location Birmingham AL Date 6-4-2015
 Project / Client 35th Ave Renewal

0730 - START Doug Fredey on site

0757 - weather: correct temp 70°F

with High of 86°F Humidity

86% Rain / wet 24hrs @ 0.1 in

Sunup 0537 sunset 1953 wind

NE @ 2 mph

0800 - Zero Deterioration & Prep staging

upwind Deterioration to be returned

for repairs.

0825 - START Air monitoring staging

Downwind

0840 - START Air monitoring CVO254B

1000 - START Air sample CVO254B - BAP

1009 - Downwind Air monitoring CVO254B

Conc 17.8 ug/L

TWA 19.6 ug/L

MAX 30.3 ug/L

1013 - Upwind Air monitoring staging area

CVO254B

Conc 16.3 ug/L

TWA 21.0 ug/L

MDX 36.4 ug/L

6-4-2015

Location Birmingham AL Date 6-4-2015

Project / Client 35th Ave Renewal
 87° @ 1436

1017 - staging Downwind. Air monitoring

Conc: 21.2 ug/L

TWA: 23.4 ug/L

MAX 36.5 ug/L

1216 - late note: CVO254B is a 12 in

Dig. However soil discoloration

still persists, instructed Conc

to dig to 24 in in block areas

1221 - Downwind CVO254B Air monitoring

Conc: 13.7 ug/L

TWA: 16.8 ug/L

MAX: 30.3 ug/L

1226 - Upwind CVO254B Air monitoring

Conc: 15.0 ug/L

TWA: 18.1 ug/L

MAX: 49.5 ug/L

1300 - Backfill of CVO401B continues

1400 - stop Air Sample CVO254B - BAP

1433 - Finished Prepping Air sample CVO254B

1535 - stop CVO254B Air monitoring

1550 - stop staging Air monitoring

1608 - Downwind BAP for Deterioration

1640 - START off site for Deterioration

111 - Drop Deterioration - End of Day

6/4/2015

Location Birmingham AL Date 6/5/2015
 Project / Client 35th Ave Renovation

0715 - START Doug Fraley on site

Weather: 72°F High 88°F

Humidity 82% Wind NE at

2 mph Sunrise 0537 sunset

1954. 0.0 in Rain last 24 hrs

0732 - Zero Data Runs

0804 - START Air monitoring staging

0831 - start Air monitor at CV0254B

0848 - Replenish Data Run arrived but

is not charged, so no upwind data Run

Today

0941 - Sed being put down at CV0048B

1253 - Downwind at CV0254B Air mon

dose 15.2 ug/m³

TWA 14.6 ug/m³

MAX 21.2 ug/m³ 0831

1256 - upwind at CV0254B Air mon

dose 12.2 ug/m³

TWA 11.4 ug/m³

MAX 22.2 ug/m³ @ 0903

1300 - Sed being put down at CV048B

6/5/2015

By *Fr*

Location Birmingham AL Date 6/5/2015
 Project / Client 35th Ave Renovation

1305 - Down wind staging area

dose: 27.6 ug/m³

TWA: 22.4 ug/m³

MAX 44.6 ug/m³ @ 1005

1306 - Back fill CV0401B completed. -

1600 - stop Air monitoring at CV0254B

1610 - stop Air monitoring at staging

1620 - Off load Data Run data

1700 - start off site End of Day

By *Fr*

6/5/2015

Location Birmingham AL Date 6/8/2015
 Project / Client 35th Ave Renovation

- 0800 - START on site Doug Freely. bery
 Zero Delta Rains. —————
 0845 - weather: Temp 80.4°F with
 high of 88°F. Humidity 72%
 30% chance of Rain. 0.0 in
 of Rain in + 24 hrs. Sunrise at
 0536 and sunset at 1955 — E
- 0938 - START Staging area Air man
 0946 - START CVO254B Air monitoring
 0958 - Removal CVO254B catfishes
 1332 - Down wind CVO254B Air monitor
 Case: 12 ug/m³
 TWA: 14.5 ug/m³
 MAX: 20.9 ug/m³ @ 1040 — E
- 1335 up wind CVO254B Air monitoring
 Case: 10.0 ug/m³
 TWA: 13.3 ug/m³
 MAX: 25.5 ug/m³ @ 1000 — E
- 1336 - Removal of CVO254B Condenser
 1343 - Removal of CVO254B Finish work
 CVO254A beginning ————— E

6/8/2015

D. Freely

Location Birmingham AL Date 6/8/2015
 Project / Client 35th Ave Renovation

- 1411 - Removal CVO254A catfishes
 1417 - up wind staging area ————— E
 Case 15.1 ug/m³
 TWA 18.9 ug/m³
 MAX 98.2 ug/m³ @ 1023 — E
- 1420 - Down wind staging catfishes
 Case 16.2 ug/m³
 TWA 24.7 ug/m³
 MAX 145 ug/m³ @ 1320
- 1422 - Informed time of Dust Control
 issue at staging area — E
- 1607 - STOP CVO254B Air monitoring
 1615 - stop staging area Air monitoring
 1638 - Downland Delta River Delta — E
- 1746 - off site to FedEx for shipping supplies
 1713 - End of Day —————

6/8/2015

D. Freely

Location Birmingham AL Date 6-8-2015
 Project / Client 35th Ave Renewal

0745 - START Day Friday On Site
 begin to do Districts —
 0756 - weather: current temp 76°F
 with high today of 89°F
 wind N at 0 mph Humidity
 84%. Rain lat 24hr period.
 0.0 in. Sunrise 0536 sunset 1956.
 0830 - START Airmonitors staying —
 0845 - start Airmonitors CVO254A
 Removal CVO254A continues.
 1037 - Removal CVO254A continues.
 1040 - CVO254A upwind Airmonitors
 case 19.7 ug/m³
 TWA 21.1 ug/m³
 max 83.0 ug/m³ @ 0854 —
 CVO254A Downwind Airmonitors
 Case: 20.2 ug/m³
 TWA: 22.5 ug/m³
 max: 54.9 ug/m³ @ 0856
 1422 - upwind CVO254A Airmonitors
 Case 19.6 ug/m³
 TWA 22.2 ug/m³
 max 210.6 ug/m³ @ 1311
 6-8-2015 35th

Location Birmingham AL Date 6-8-2015
 Project / Client 35th Ave Renewal

1424 - upwind staying near
 Case: 20.7 ug/m³
 TWA: 27.5 ug/m³
 max: 89.2 ug/m³ @ 0834
 1426 - Downwind staying near
 Case: 20.8 ug/m³
 TWA: 30.6 ug/m³
 max: 103 ug/m³ @ 0842
 1433 - High Dust F CVO254A
 upwind informed Case
 of High Dust levels of
 Dust, most likely Dust is
 from CleanFill Because of
 CleanFill being put down.
 1600 - stop Airmon CVO254A
 1615 - stop Airmon staying
 1620 - downwind Downwind Rem Down —
 1641 - late note: CVO254B Backfill
 started —
 1700 - START 085 site End of Day
 6-9-2015 35th

Location Birmingham AL Date 6-10-2015
 Project / Client 35th Ave Renovation

0730- START Day Treley on site
 0745- Zero Outer Rens
 0817- weather: current Temp 72°F

Hickof 9/12. Humidity is
 93% wind SW @ 10 mph Rain
 1st + 24 hrs 1.25 inch
 0831- No Removal, backfill C10254A4B

Date Ren deployment delayed
 until removal activities begin
 + High Humidity

0853- very High Humidity delaying
 deployment of Data Rens
 1150- START Air man Morn out stying

1504- ground stying case
 case, 26.0 yd³

TWA 30.8 yd³
 MAX 51.3 yd³

1509 Demolish (C) stying case

case 31.9 yd³
 TWA 34.2 yd³
 MAX 54.2 yd³ @ 1233

6/10/2015

8 days

Location Birmingham AL Date 6-10-2015
 Project / Client 35th Ave Renovation

1537- stop Air working at stying
 1536- Demolish Data Rens
 1605- shot off site for FedEx
 for hoop printing
 1655- finished FedEx hoop printing
 run end of Day

0578

6-10-2015

Location Birmingham AL Date 6-11-2015
 Project / Client 35th Ave Removal

0752- START Doug Friday at FedEx to

Pickup map Document

0828- START on site begin to excavate

Rains

0855- weather: current Temp 77°F, wind

NO @ 4 mph, humidity 82%.

High today of 88°F. 50% chance

of Rain. Rain last 24hrs 0.12

inch

0958- CV1290A Removal continues. started

1040- Air monitoring Delayed because

of High Humidity & Rain showers

in area

1435- Backfill of CV0254A & B stopped

because of Rain. Removal CV1290A

stopped because of Rain

1500- site activities have stopped from

Heavy Rain. Start of 5th End of

Day

6-11-2015

Location Birmingham AL Date 6-12-2015
 Project / Client 35th Ave Removal

0800- START on site (Doug Friday)

0812- weather: 74°F High of 86°F

wind NE @ 3 mph Humidity

82% Sunrise 0536 sunset 1937

Rain last 24hrs is .25 inch

0843- High Humidity & Isolation for up

Showers has delayed back Rain

Air monitoring for better weather

conditions

0957- Removal CV1250A continues

CV0254A & B having difficulty

& shovels put back in

1128- Backfill of CV0254A & B completed

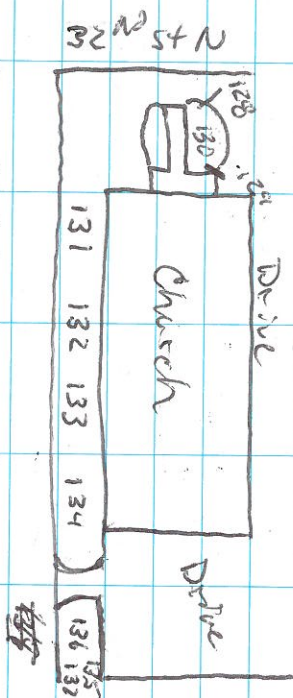
- Tree scrubbing at CV02273 started

1630- start off site end of Day

6-12-2015

Location Birmingham AL Date 6-15-2015
 Project / Client 35th Ave Renewal

0715- START Dog Pearly on site, weather
 current temp is 82°F with high
 today of 92°F, Humidity 74% wind
 NE @ 0 mph. 0.0 inch Rain past
 24 hrs. Sunrise 0536 Sunset 1958.
 0744- Zed Dishes Rems.
 0758- CVO252A Round started
 0815- Air monitoring AVO252A started
 0900- start Air monitoring station area
 0940- Finish XRF CVO252A



137- Pb 80±6 Ag 7±5
 136- Pb 138±8, Ag 21±6
 135- Pb 88±7, Ag 12±5
 134- Pb 84±11, Ag 21±13
 133- Pb 500±15, Ag 26±11
 132- Pb 351±13, Ag 20±10
 131- Pb 409±13, Ag 19±10

Location Birmingham AL Date 6-15-2015
 Project / Client 35th Ave Renewal

0946- 128- Pb 1355 I27, Ag 52±20
 129- Pb 78±21, Ag 99±16
 130- Pb 424±14, Ag 23±10
 126- RCR A standard.
 499±16 Ag 421±16
 125- Blank standard.
 76 8±3, Ag 20±3
 124- System Check
 123- System Check

1058- CVO252A upwind Air monitor
 has quite/battery very hot and
 high dust levels (noticed).
 Case of Problem

1300- CVO252A original dig depth
 was 18" monitor area is still hot
 at 18" so we have decided to dig
 all to 24"
 1305- Finished talk 24" ref bag sample
 and part variability for mole excavation
 to occur

6-15-2015

23

Location Birmingham AL Date 6-15-2015
 Project / Client 35th Ave Renovation

1316 - Upward styling seen
 Case: 304 y/lw3
 TuA: 32.0 y/lw3
 MAY 60.2 y/lw3 @ 1238 —
 1318 - Demanded sk in corner
 Case 32.7 y/lw3
 TuA 29.2 y/lw3
 MAY 63.5 y/lw3 @ 0908 —
 1325 - cv0252A Air monitoring Demanded
 Case 18.6 y/lw3
 TuA 19.3 y/lw3
 MAY 35.8 y/lw3 @ 1303 —
 1505 - Pulled another - adiquot XRF
 Sample —
 1535 - Pulled another aliquot XRF
 1540 - Stop Air Monitoring CV0252A
 1605 - Stop Air monitoring out styling
 1632 - off site for FedEx shipment
 1648 - Drop FedEx End of Day —

6-15-2015 DJ

Location Birmingham AL Date 6-16-2015
 Project / Client 35th Ave Renovation

0800 - start on site Day Friday —
 0813 - weather! 82°F current High of 86°F
 Today wind NW @ 4 mph. Humidity 73%
 0.0 in Rain / last 24 hrs. —
 0819 - Zero Dust - Pass —
 0844 - XRF standards
 Black - Pb 10 ± 4, As 10 ± 3
 RCRA - Pb 504 ± 18, As 42 ± 17
 0902 - The Composite XRF Sample at 24 in
 for CV0252A —
 142 - Pb 46 ± 15, AS - 33 ± 12
 143 - Pb 1258 ± 6, AS - 102 ± 20
 144 - Pb 724 ± 20, AS - 41 ± 15
 145 - Pb 453 ± 14, AS - 26 ± 14
 146 - Pb 669 ± 18, AS - 28 ± 13
 Air - Pb 714, AS 46 @ 24 in
 0922 - start styling area Air monitoring
 1000 - start styling area Ball sample
 - * Removal of Backfill of CV0252
 Completed on 6/15/2015 so
 going in 6/16/2015 —

6/16/2015 DJ

Location Birmingham AL Date 6/16/2015
 Project / Client 35th Ave Removal

1020 - I'de note Removal CV1290A finished
 6/12/2015 Beckell finished 6/16/16
 1036 - CV 0559B Removal started
 1357 - upwind Air monitoring staging
 case 25.9 ug/m³
 TWA 22.6 ug/m³
 MAX 36.6 ug/m³ @ 0832
 1400 - stop air sample @ staging area
 1405 - staging downwind Air monitor
 case 15.8 ug/m³
 TWA 18.0 ug/m³
 MAX 33.2 ug/m³ @ 0936
 1411 - stopped Air monitoring because
 of isolated Pop up showers
 1535 - Ref Sample staging - RAP13 & Data
 Row that failed because of battery
 1631 - off site To FIDEX ship sample
 & send Defective Data Row back to
 EPA
 1702 - Drop FedEx End of Day
 6/16/2015

Location Birmingham AL Date 6/17/2015 93
 Project / Client 35th Ave Removal

0745 - START Day Friday on site
 0811 - weather: current temp 84°F high
 of 96°F, Humidity 67% wind AD
 at 3 mph. D.D in / east 24 hrs
 Sun up 0536 sunset 1959
 0819 - Zero Data Row
 0830 - start Air monitoring staging
 0839 - start Air monitoring CV0559B
 1226 - CV0559B Air monitoring downwind
 case 17.1 ug/m³
 TWA: 22.2 ug/m³
 MAX 78.6 ug/m³ @ 1154
 1230 - upwind staging area
 case: 22.5 ug/m³
 TWA: 23.1 ug/m³
 MAX: 51.7 ug/m³ @ 0834
 1232 - Downwind staging area
 case 23.5 ug/m³
 TWA 30.4 ug/m³
 MAX: 56.7 ug/m³ @ 0838
 236 Air points collected
 6/17/2015

Location Birmingham AL Date 6/17/2015
 Project / Client 35th Ave Removal

1335 stop Air monitoring because
 of Isolated PRRup Shows
 1617 - Down Road Data-Random
 1658 - start off site End of Day

D3 Eng

6/17/2015

Location Birmingham AL Date 6/18/2015
 Project / Client 35th Ave Removal

0745 - start DayFoley on site
 weather: 81°F in high at 84°F
 wind NW @ 0 mph. Rain lat 24 hr
 period. 08:00 Humidity 75%
 sunrise 0537 sunset 1959.

0815 - End Data Runs.

0830 - stop Air monitoring at Staging
 0900 - Removal of CV0558A started

Backfill of CV0558B started

1008 - Removal of Root Removal on
 CV0558A

1248 - performed Cure of Dry dust
 Conditions at CV0558A (suggested)

1421 - upwind Staging area

Cond: 15.9 ug/m³

TMA: 18.8 ug/m³

MAR: 43.5 ug/m³ @ 0841

1424 - Downwind staging area

Cond: 28.1 ug/m³

TMA: 26.0 ug/m³

MAY 61.2 ug/m³ @ 1422

6/18/2015

Location Birmingham AL Date 6/18/2015
 Project / Client 35th Ave Removal

1431 - CV05591A Downwind Air monitors
 Conc: 12.6 ug/m³
 TWA: 15.4 ug/m³
 MAX: 18.6 ug/m³
 1431 Stopped all Air monitors from
 PAP-UP Isolated steroids
 1615 - Downwind Data Run Data — E
 1700 - START off site Day — E

Big fly

6-19-2014

Location Birmingham AL Date 6/18/2015
 Project / Client 35th Ave Removal

0745 - START Day Reley on site
 0804 - weather: Temp 80°F High 94°F
 Wind SW @ 5 mph Humidity 81%
 Rainfall last 24 hrs 0.0 in
 Sunrise 0537 Sunset 1000
 0826 - End Data Run
 0850 - Start Air monitors staying
 0900 - Start Air monitors CV05591A
 Removal activities at CV05591A
 1114 - upwind at staying
 Conc: 8.3 ug/m³
 TWA 12.8 ug/m³
 MAX: 26.8 ug/m³ @ 0904 —
 1117 - Downwind @ staying
 Conc 14.7 ug/m³
 TWA 17.3 ug/m³
 MAX 46.5 ug/m³ @ 0923 —
 1122 - Downwind @ CV05591A
 Conc 3.6 ug/m³
 TWA 10.8 ug/m³
 MAX 110 ug/m³ @ 0926 —

6/18/2015

Location Birmingham AL Date 6/18/2015
 Project / Client 35th Ave Removal

1123 - CVO559A Removal completed
 CVO559A Beckfill started
 CVO559B Beckfill started
 1239 - Late note Air man being stopped
 at 1115 because excavation has
 been completed for today —
 1345 - START off site End of Day

BS

6/19/2015

Location 98 Date 22-JUN-15
 Project / Client 98

0745 - S. DeLaRue site dense
 CMC already onsite
 0810 - Weather: 77° Sun
 Forecast - High today 95°F
 Winds NNW at 5 mph
 Humidity = 61%
 0815 - Ergo data Pams
 0840 - Set-up upwind staging
 CMC: 64.0 $\mu\text{g}/\text{m}^3$
 LTHA: 55.4 $\mu\text{g}/\text{m}^3$
 0845 - Set-up downwind staging
 CMC: 69.2 $\mu\text{g}/\text{m}^3$
 LTHA: 72.8 $\mu\text{g}/\text{m}^3$
 0930 - Set-up upwind CVO724A
 CMC: 72.4 $\mu\text{g}/\text{m}^3$
 LTHA: 58.9 $\mu\text{g}/\text{m}^3$
 0935 - Set-up downwind CVO724A
 CMC: 54.1 $\mu\text{g}/\text{m}^3$
 LTHA: 45.7 $\mu\text{g}/\text{m}^3$
 1100 - Site work continues at CVO724A
 1200 - START offsite for lunch
 1300 - START onsite from lunch
 Excavation continues at CVO724A

22 JUN-15

NOTE - CU0724A CU0724B and
HP0332A all are at same
address.

B30 - Stop CU0724A air
monitoring due to pop-up
thunderstorm reported in the
area.

1540 - Stop staging area monitoring
1600 - Download Data Ram data
Unable to download upwind
data from the site and
the staging area.

1630 - Crew finished excavation
at CU0724A. Thunderstorm
is now moving through the area.
1645 - START OFFSITE.

22-JUN-15

23-JUN-15

0745 - START DataReintre inside
Weather: 75°F Sunny

Forecast High = 95°F Sun

Winds WNW at 7 mph

Humidity at 62%

0800 - Zero data Rams

0923 - Deploy downwind Staging

Conc = 63.7 $\mu\text{g}/\text{m}^3$

LTWA = 79.7 $\mu\text{g}/\text{m}^3$

0830 - Deploy upwind Staging

Conc = 70.3 $\mu\text{g}/\text{m}^3$

LTWA = 69.8 $\mu\text{g}/\text{m}^3$

There is no excavation activities
this morning. Excavation
FMO047 scheduled for this
afternoon.

NOTE - There will be no
excavation or load-out activities
today.

1203 - Stop upwind Staging

Conc: 48.2 $\mu\text{g}/\text{m}^3$

LTWA: 53.0 $\mu\text{g}/\text{m}^3$

1211- Stop downwind Staging

Conc: 50.0 $\mu\text{g}/\text{m}^3$

LTWA: 61.5 $\mu\text{g}/\text{m}^3$

1230- Download data Ram data

1300- Crew is backfilling

C10724 and preparing FM0047
for excavation tomorrow.

1330- START off-site

23-JUN-15

[Signature]

0800- START Relocative

off-site.

WEATHER: Cloudy 80°F

Forecast High 95°F possible

thunderstorms Forecast later

today, winds NW at 7mph

Humidity is 64%

0910- Field Data Ram

0920- Deploy upwind Staging

Conc = 19.4 $\mu\text{g}/\text{m}^3$

LTWA = 38.6 $\mu\text{g}/\text{m}^3$

0930- Deploy downwind Staging

Conc = 24.8 $\mu\text{g}/\text{m}^3$

LTWA = 21.3 $\mu\text{g}/\text{m}^3$

0950- Deploy upwind FM0047

Conc = 32.0 $\mu\text{g}/\text{m}^3$

LTWA = 41.0 $\mu\text{g}/\text{m}^3$

0955- Deploy downwind FM0047

Conc = 13.3 $\mu\text{g}/\text{m}^3$

LTWA = 13.1 $\mu\text{g}/\text{m}^3$

1000- Grease/Ven machines

at FM0047

1300- Excavation continues

at FM0047

1630 - Stop upwind Staging

CNC = $9.6 \mu\text{g}/\text{m}^3$

LTWA = $15.4 \mu\text{g}/\text{m}^3$

1635 - Stop downwind Staging

CNC = $9.0 \mu\text{g}/\text{m}^3$

LTWA = $8.6 \mu\text{g}/\text{m}^3$

1640 - Upwind of MOD47 already

1645 - Stop downwind MOD47

CNC = $10.7 \mu\text{g}/\text{m}^3$

LTWA = $10.7 \mu\text{g}/\text{m}^3$

1700 - Download data from

Data Rans.

1730 - Start opsite

24-JUN-15

[Signature]

0800 - START Delta Relative anst

0805 - Zero Data Rans

0810 - Weather: 75°F Sunny

Forecast high 95°F Sun

Winds SSE at 2 mph

Humidity = 63%

0820 - Deploy upwind Staging

CNC = $33.3 \mu\text{g}/\text{m}^3$

LTWA = $31.6 \mu\text{g}/\text{m}^3$

0825 - Deploy downwind Staging

CNC = $32.4 \mu\text{g}/\text{m}^3$

LTWA = $33.3 \mu\text{g}/\text{m}^3$

0840 - Deploy downwind MOD47

CNC = $22.9 \mu\text{g}/\text{m}^3$

LTWA = $20.4 \mu\text{g}/\text{m}^3$

0850 - Deploy upwind MOD47

CNC = $16.8 \mu\text{g}/\text{m}^3$

LTWA = $23.1 \mu\text{g}/\text{m}^3$

1110 - Downwind Staging

CNC = $27.8 \mu\text{g}/\text{m}^3$

LTWA = $28.9 \mu\text{g}/\text{m}^3$

1112 - Upwind Staging

CNC = $26.4 \mu\text{g}/\text{m}^3$

LTWA = $25.8 \mu\text{g}/\text{m}^3$

25-JUN-15

1125 - Upwind FMO047

CANC = 0.0 $\mu\text{g}/\text{m}^3$ LTWA = 2.8 $\mu\text{g}/\text{m}^3$

1130 - Downwind FMO047

CANC = 15.2 $\mu\text{g}/\text{m}^3$ LTWA = 20.0 $\mu\text{g}/\text{m}^3$

1345 - Excavation FMO047 complete

~~CANC = 0.0 $\mu\text{g}/\text{m}^3$~~ ~~LTWA = 0.0 $\mu\text{g}/\text{m}^3$~~

1350 - Stop Upwind FMO047

CANC = 0.0 $\mu\text{g}/\text{m}^3$ LTWA = 1.5 $\mu\text{g}/\text{m}^3$

1350 - Stop Downwind FMO047

CANC = 21.5 $\mu\text{g}/\text{m}^3$ LTWA = 19.8 $\mu\text{g}/\text{m}^3$

1420 - Stop Upwind Staging

CANC = 30.3 $\mu\text{g}/\text{m}^3$ LTWA = 26.7 $\mu\text{g}/\text{m}^3$

1423 - Stop Downwind Staging

CANC = 35.9 $\mu\text{g}/\text{m}^3$ LTWA = 29.7 $\mu\text{g}/\text{m}^3$

1430 - Down load Data Ram data

1530 - START offsite

SUSPENSE

26-JUN-15

0745 - START DelaReichthie on site

Weather: 78° SUN. Forecast

High for today = 91°F & Sun

Winds SW at 6 mph

Humidity = 67%

Zero data Rams

Crew will begin excavating

FMO227 later today

Crew is currently backfilling

FMO047.

1039 - Crews are clearing FMO227

and backfilling FMO047.

1430 - Crew begins excavation

at FMO227. No Data Rams

are deployed. It is sprinkling

rain and humidity is 80%.

1530 - START offsite.

26-JUN-15

M. J. Miller

Location Birmingham A1 Date 7/27/15
 Project / Client 35th Ave Renovation 06/29/2015

0945- START on site —
 0910- weather: 75°F in the high
 today of 71°F, Humidity 70%
 wind SW upto 6 mph sunrise
 6:53g sunset 10:01, 0.0 in Rain
 Lat 24kts —
 0830- ~~Start~~ Data Recs —
 0925- start at monitoring out station
 upwind Data Rec located at N33.0880g
 W-86.797505
 Dam wind 33.55 @ 132, -86.7908023
 1002- Removal of FM0221 Containment and
 is almost completed,
 1247- upwind Data Rec stationing —
 core 10.1g/h3
 Turb 11.8g/h3
 MAX 21.1g/h3 @ 0953 —
 1250- Dam wind stationing
 core 20.3g/h3
 Turb 16.8g/h3
 MAX 33.5g/h3 @ 0930 —
 1413 late notes: Removal of FM0221
 was completed early so no Airman then
 but excavator is being used to backfill

Location Birmingham A1 Date 6/29/2015
 Project / Client 35th Ave Renovation

1424- upwind Air monitoring
 core: 9.0g/h3
 Turb: 11.5g/h3
 MAX: 36.2g/h3 @ 1303 —
 1427- Dam wind Air monitoring
 core: 15.0g/h3
 Turb: 16.8g/h3
 MAX: 33.5g/h3 @ 0830 —
 1600- Back fill FM0221 Containment
 1600- stop Air man. stationing
 1631- off load Data Rec stationing
 1648- START off site —

6/29/2015

[Signature]

Location Birmingham AL Date 6/30/2015
 Project / Client 35th Ave Removal

0715- START Day Fesley on site
 0740- weather: SEVER Thunderstorms
 current operations stopped.
 Due to weather no Air monitoring
 71°F High 84°F. wind ~~100%~~
 South East @ 21 mph Humidity
 100% sunrise 0540 sunset 1001
 1330- Removal of CVO511RRR started,
 1651- START off site Rd of Day

[Signature]

6/30/2015

Location Birmingham AL Date 7/1/2015
 Project / Client 35th Ave Removal Phase II

0741- START Day Fesley on site
 0753- weather: Temp 71°F High 84°F
 wind WSW up to 7 mph Humidity 90%
 Rain last 24 hr Period 0.5 inch
 sunrise 0540 sunset 1001. Due to
 high Humidity Debris Run deployment
 is delayed for the week end and Mon.
 0843- Dirty Dirt from stockpile being shipped
 at _____

0858- Backfill of CVO511RRR started

0900- start shoring air monitoring
 upland location 33.55804-86.07505
 Downwind 33.558132-86.7908023

1045- Upwind Air monitoring

COVE: 34.2 ug/L₃
 TWA: 27.5 ug/L₃

max: 38.2 ug/L₃ @ 0930

1047 - Downwind Air monitoring

COVE: 27.4 ug/L₃
 TWA: 24.2 ug/L₃
 max: 49.8 ug/L₃ @ 0933

7/1/2015

[Signature]

Location Birmingham AL Date 7/1/2015
 Project / Client 35th Air Refuel Phase III

1245 - Airman stopped outshy
 from Pop-top Showers @ 1100 -
 1620 - START off site End of Day

B3

7/1/2015

Location Birmingham AL Date 7/13/2015 113
 Project / Client 35th Air Refuel Phase III

0800 - START Day Early on site.

Weather: 84°F currently High today
 96°F, Humidity 75%. On last 24
 hrs for Tech. Service 054 sunset
 1958.

0849 - unlead equipment from van and
 begin to reassemble field equipment
 1000 - Bell 8:11 of CVD5117RRR was completed

on 07/1/2015

1250 - START ED airman drive -

stop in

1503 - Return of Removal @ CVD227

started. The Replacement Defenders
 from Pine were dead and

needed charging, so we Airman

CVD227 -

1557 - UP wind starting Airman battery
 dec 86 g/l

turn 10.90 g/l

max 36.40 g/l @ 1428

7/13/2015

B3

Location Birmingham AL Date 7/13/2014
 Project / Client 35th Removal Phase III
92°F @ 1310

1600 - Damined Air monitoring
 Case: 17.3 ug/m³
 TWA: 14.2 ug/m³
 MAX: 26.2 ug/m³ @ 1415
 1605 - STOP Air monitoring & staying
 1630 - Start off site @ end of Day

JS

7/13/2014

Location Birmingham AL Date 7/14/2014
 Project / Client 35th Removal Phase III

0745 - START Day Friday on site —
 0811 - weather: 81°F w/ the high of
 98°F wind NW @ 2 mph Humidity
 78% Sunrise 0549 sunset 1958.
 D.O. in Rain lot 24 hr —
 0830 - End Data Run —
 0844 - Removal of CVO222 continues
 0906 - started Air monitoring at staging area
 1120 - started Air monitoring at CVO222
 1130 - Heat warning today 88°F
 1348 - UP wind eddy core —
 (core) 16.5 ug/m³
 TWA: 21.3 ug/m³
 1351 - Damined staging area
 Case: 19.0 ug/m³
 TWA: 20.6 ug/m³
 MAX: 40.2 ug/m³
 upwind Data Run has Developed
 logging problem & will be Replaced
 1404 - CVO222 upwind Data Run
 was DIED.

7/14/2014 *JS*

Location Birmingham AL Date 2/14/2014
 Project / Client 35th Ave Removal Phase III

1404 - Downwind Debris Run CVD227
 Conc: 17.2 ug/l³
 Turb: 17.8 ug/l³
 max 63, 25 ug/l m³ @ 1115
 1604 stopped Air monitoring during staging
 1615 - stopped Air monitoring CVD227
 upwind CVD227 Debris Run
 Died (Heart) —————
 1632 - Down Road Debris Run
 1701 - START off site —————

1370

2/14/2015

Location Birmingham AL Date 2/15/2014
 Project / Client 35th Ave Removal Phase III

0230 - START Day Freely on site —————
 0740 - weather - 75°F with High of 95°F today
 Humidity 89% wind NW at 0 mph
 0743 - 2nd Debris Run
 0800 - Debris Run Air monitoring delayed
 by weather & humidity
 0829 - Paste note Rain last 24 hrs .25 of inch
 0855 - START Air monitoring at staging —————
 0910 - started Air monitoring at CVD227
 1305 - upwind staging area debris Run
 Conc: 60.9 ug/l³
 Turb: 41.8 ug/l³
 max: 92.2 ug/l³ @ 1058 —————
 1310 - Downwind staging
 Conc: 28.0 ug/l³
 Turb: 24.4 ug/l³
 max: 44.5 ug/l³ @ 0910 —————
 1332 - upwind CVD227 debris Run failed
 CVD227 Removal continued
 1344 - Downwind CVD225 Debris Run
 Conc: 21.5 ug/l³
 Turb: 16.2 ug/l³
 max: 33.4 ug/l³ @ 0915 —————
 ST opened Air monitoring Popo Popo Shores

Location Birmingham A1 Date 7/15/2015
 Project / Client 35th Ave Removal Phase III

1400 - stopped at mon, berry out staying
 over Pop-up showers High Humidity
 1414 - If up wind unit at staging
 unit is caused by circ cutting
 across close to unit

1600 Down load Data Rec Data Rec
 1630 - Fed Rx Shipmant off site
 1650 - Dropped FEDEX Shipmant end of Day

By

7/15/2015

Location Birmingham A1 Date 7/16/2015
 Project / Client 35th Ave Removal Phase III

0725 - START Doug Foley on site

0755 - Zero Data Recs

0823 - weather: Temp 80°F high 96°F wind

NE at 2 mph. Humidity 86%

Sunrise 0548 Sunset 1957, Dew lat

24 hrs. 0.0/lat 24 hrs

0908 - Air monitoring delayed because of
 high Humidity

0909 - Removal of CV0225 continues

0927 - 90°F

0945 - Start air monitoring at staging

1434 - Removal of CV0227 & CV0225

Completed Backfill started

CV0256 Removal started

1601 - upwind at staging area

conc 26.1 ug/m³

cont 0.4 ug/m³

max 21.4 ug/m³ @ 1601

1603 - Down wind at staging area

con 22.3 ug/m³

TPA 18.0 ug/m³

max 83.0 ug/m³ @ 0958

By 7/16/2015

Location Birmingham A1 Date 7/16/2015
 Project / Client 35th Ave Removal Phase III

1610- stop Air monitoring at string
 area 990F 0
 1620- Down load Data Run Data
 1717- START off site End of Day

B. J. J.

7-16-2015

Birmingham A1

Date 7/17/2015 121

Project / Client 35th Ave Removal Phase III

0752- START Day Friday on site
 0759- weather Temp 78°F High 92°F
 Humidity 79% 0.0 in Rain/last
 24hrs Sunrise 0549 Sunset 1957
 wind N at 0 mph 0
 0804- CVO225/CVO227 Backfill continues
 CVO256 Removal completed 7/16/2015
 as a late note, Gabby at CVO290
 started 0
 0837- No Removal activity is current day
 1631- START off site for Eddy mapping
 Run 0
 1705- Dropped Feed Bx start mapping
 order. End of Day 0

7/17/2015

B. J. J.

Location Birmingham AL Date 7/20/2015
 Project / Client 35th Ave Removal

0745 - Pick up mops at FedEx

1032 - Checked Area of Housing projects

Area checked was located in the CVO74816K one part of this scenic location is elevated for lead.

Blank #3 - Pb 5 ± 3 As nd ± 3

RCRA #4 - Pb 474 ± 17 As 436 ± 16

δ # - Pb 83 ± 7 As nd ± 8

δ # - Pb 115 ± 10 As 19 ± 8

δ # - Pb 382 ± 14 As, nd ± 15

δ # - Pb $621 - Pb \pm 94$ As, nd ± 103

1200 - ~~ART~~ Air monitoring at

~~DE~~ styling used Downwind

1230 - CVO790 Removal started

1225 - Land note CVO790 Air monitoring

Started at around 1200 ~~WW~~

1230 - Removal at CVO74816K started

Air monitoring at CVO74816K

Started

Location Birmingham AL Date 7/20/2015
 Project / Client 35th Ave Removal

1353

#12800

#16

#13

#12

#11

#10

#9

#8

#7

#6

#5

#4

#3

#2

#1

#0

#-1

#-2

#-3

#-4

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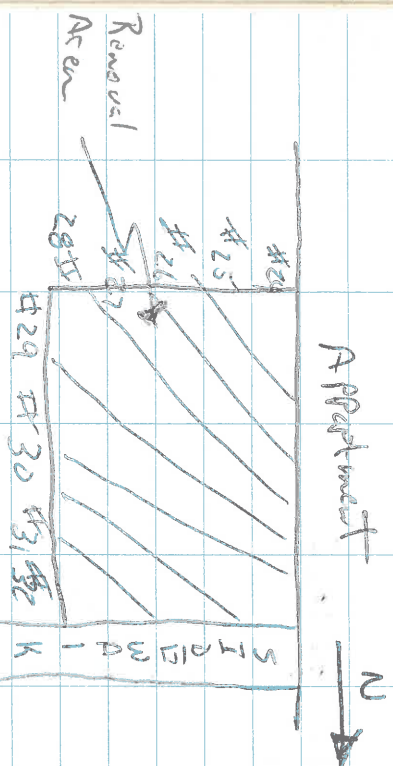
#37

#38

#39

Location Birmingham AL Date 7/20/2015
 Project / Client 35th Ave Removal

1414 - location Air man at CVO24845
 33.553966 - 86.805921
 # 24 - 76 29 ± 4 AS 20 ± 4
 # 25 - 76 70 ± 6 AS 14 ± 5
 # 26 - 76 109 ± 7 AS 13 ± 6
 # 27 - 76 75 ± 7 AS 11 ± 6
 # 28 - 76 121 ± 8 AS 9 ± 6
 # 29 - 76 126 ± 8 AS 13 ± 6
 # 30 - 76 124 ± 8 AS 14 ± 6
 # 31 - 76 87 ± 7 AS 15 ± 5
 # 32 76 65 ± 6 AS 10 ± 5



7/20/2015

D. Foley

Location Birmingham AL Date 7/20/2015
 Project / Client 35th Ave Removal

1501 - STOP Air man leaving at CVO20790
 1610 - Downland Better Run Data
 Late note Data Run were Zero
 out today
 1648 - START off site END of Day

7/20/2015

D. Foley

Location Birmingham A1 Date 7/21/2015
 Project / Client 35th Ave Removal

- 0715 - START on site - Doug Finley
 0730 - zero Data Runs, Cal 545 in
 prep for Air Sample
 0800 START Air Sample CVO 790-AS01
 start air monitoring CVO 790
 0805 - START Air Sample Staging - AS26
 start Air monitoring staging
 Downwind, waiting for rain
 directional part from Pine for
 the upwind Air monitor in
 late note CVO 748K was back 11:00
 7/20/2014
 0834 33.558145 - 86.797933 Downwind
 staging Air monitors
 weather: 84°F High 94°F Humidity
 77% wind NW @ 5 mph gusts
 Sunrise 0551 Sunset 1935
 0841 0.0 in Rain last 24 hrs
 0900 Replenish part for opening
 staging Area Can in started
 Air monitor at staging
 opening

7/21/2015

[Signature]

Location Birmingham A1 Date 7/21/2015
 Project / Client 35th Ave Removal

- 1012 - very Dust and Dry conditions I have
 informed Cmd about high Data
 Rain coming and asked for egg. mfg
 Castles to be put in place
 1100 - weeds is being put down to control
 dust
 1600 - stop Air mon & Air Sample CVO 790-AS01
 1605 - stop Air mon & Air Sample Staging - AS26
 1610 - Recess Air Samples
 1625 - start off site FIDEX Sample Drop
 1703 - START Drops Samples End off Day

7/21/2015

[Signature]

0735- START Dog Fely on site —

0745- off load Data Run Data from 7/21/2015

Zero Data Runs —

0809- weather: 80°F with high of 92°F

Humidity 79% wind NO with

Ogusts, —

0855- start Air monitoring staging area

0915- start Air monitoring CVO790 —

Removed CVO790 continuous —

1030- stop Air monitoring isolate pop-up

shows —

1333- Removal CVO790 completed. —

1630- START off site to Dog Feed Ex

1721- START Drops Feed Ex End of Day —

BZ

7/22/2015

0745- START Dog Fely on site —

0814- weather: 77°F with high of

90°F Humidity 85% wind NW

at 1 mph sunrise 0553 sunset

1953. Rain - last 24hr less than

0.1 inch. Data Run Air monitoring

Delayed because Isolated POP up

Shows & high Humidity —

0845- Removal of CVO227A started —

1454- Removal stopped at CVO227A because

of Rain but Removal is completed —

1535- START off site end of Day at site —

BZ

7/23/2015

0806 - START Day Freely on site —

Weather: 77°F wind N at 8 mph

Humidity 90% Rain fall 1/8"

24 hr. 1.5 in. Data Rec deployment

Delayed for pop-up showers &

High Humidity —

0834 - Removal of CV0227 has resumed

because of Tree Root removal. —

1345 - Backfill CV0390 continues Tree Root

removal completed at CV0227 Removal

at CV0390 & CV0391 started. —

1642 - Backfill CV0390 finished. —

No Air monitoring because of weather

1700 - START off site end of Day —

Day

7/24/2015

0745 - START DeLaReactive

onsite. Weather 75°F Sun

Forecast High = 95°F Sun.

Winds WNW at 4 mph.

Humidity 58%.

0750 - Zero data Rams.

0800 - Excavation today

at CV0339B

0830 - Start upwind Staging

LWC = 64.9 $\mu\text{g}/\text{m}^3$

LTWA = 63.8 $\mu\text{g}/\text{m}^3$

0840 - Start downwind Staging

LWC = 78.4 $\mu\text{g}/\text{m}^3$

LTWA = 82.1 $\mu\text{g}/\text{m}^3$

0900 - Start upwind CV0339

LWC = 67.0 $\mu\text{g}/\text{m}^3$

LTWA = 62.1 $\mu\text{g}/\text{m}^3$

0905 - Start downwind CV0339

LWC = 37.7 $\mu\text{g}/\text{m}^3$

LTWA = 41.7 $\mu\text{g}/\text{m}^3$

1130 - Excavation continues at

CV0339.

Location 35TH AVE REMOVAL Date 27-JUL-15
 Project / Client Birmingham, AL

1405 - Rain Shower begins

Stop downwind Staging

C_{MC} = 35.3 $\mu\text{g}/\text{m}^3$

L_{TWA} = 36.5 $\mu\text{g}/\text{m}^3$

1414 - Stop upwind Staging

C_{MC} = 96.1 $\mu\text{g}/\text{m}^3$

L_{TWA} = 85.6 $\mu\text{g}/\text{m}^3$

1418 - Stop downwind CVO339

C_{MC} = 32.1 $\mu\text{g}/\text{m}^3$

L_{TWA} = 27.2 $\mu\text{g}/\text{m}^3$

1420 - Stop upwind CVO339

C_{MC} = 37.7 $\mu\text{g}/\text{m}^3$

L_{TWA} = 28.5 $\mu\text{g}/\text{m}^3$

1430 - All air monitoring stopped

due to rain, data run data.

1440 - Download data run data.

1600 - START offsite.

27-JUL-15

Chadwick

Location 35TH AVE Removal Date 28-JUL-15
 Project / Client Birmingham, AL

0730 - START Delta Reinter-

osite, Weather: 75°F Sun

Forecast: high: 95°F with

Possible Thunderstorms in the

afternoon. Winds NW at 5 mph

Humidity is 70% —

0735 - Zero Data Runs

Data Run DO61 - Source 2 failure

0807 - Deploy upwind Staging

C_{MC}: 33.0 $\mu\text{g}/\text{m}^3$

L_{TWA}: 24.5 $\mu\text{g}/\text{m}^3$

0914 - Deploy downwind Staging

C_{MC}: 114.7 $\mu\text{g}/\text{m}^3$

L_{TWA}: 114.7 $\mu\text{g}/\text{m}^3$

0930 - Mark property lines at

property CVO434.

~~1030 - Mark property lines at~~

~~CVO434. CVO434 is backfilling~~

~~1100 - Stop data runs due~~

~~to rain. Showers.~~

1520 - Stop upwind Staging

C_{MC}: 93.3 $\mu\text{g}/\text{m}^3$

L_{TWA}: 20.5 $\mu\text{g}/\text{m}^3$

Location 35TH AVE Removal Date 28-JUL-15
 Project / Client Birmingham, AL

1522- Stop downwind staging
 Lead: 82.6 $\mu\text{g}/\text{m}^3$ SD
 LTWA: 52.6 $\mu\text{g}/\text{m}^3$ SD
 1615- START SITE SD

28-JUL-15

Signature

Location 35TH AVE Removal Date 29-JUL-15
 Project / Client Birmingham, AL

Begin Phase IV Removal
 See Phase IV Logbook

29-JUL-15

Signature

APPENDIX F
LABORATORY REPORTS



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

March 23, 2015

Russell Henderson
Oneida Total Integrated Enterprises
1220 Kennestone Circle, Suite 106
Marietta GA 30066

TEL: (678) 355-5550

FAX: (414) 257-2492

RE: 35 Avenue Removal

Dear Russell Henderson:

Order No: 1503F80

Analytical Environmental Services, Inc. received 1 samples on 3/17/2015 11:15:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

- NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
- AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Dorothy deBruyn
Project Manager

www.aesatlanta.com

1503F80

CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS

Client Name: OTIE Contact: Russell Henderson
Address: 1270 Kennestone Ctr Phone: 678-255-6911
Marietta GA 30066 Fax:

Project Name/#: 35th Area Removal
 Samplers Name: Doug Foutley
 Sampling Date: 3-16-2015

[illegible]

Turnaround Time:

Normal (5 days):



3 Days Rush:

2 Days Rush:



Next Day Rush:



Comments:

Relinquished By: <i>D. J. Fry</i>	Date/Time	<i>3-16-2015</i>
Received By:	Date/Time	
Relinquished By:	Date/Time	
Received By: <i>Cataya Reeves</i>	Date/Time	<i>3/17/15 11:15a</i>

Delivered Direct to Lab:

☒

Shipped:

Method of Shipment:

INDEX

Lab Recipient:

Date: 3-16-2015 Page 2 of 8

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE FOLLOWING BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.

Analytical Results

for

Oneida Total Integrated Enterprises

Date: 23-Mar-15

Workorder: 1503F80

Client Reference: 35 Avenue Removal

Analyte	Concentration					Limit of Detection (ug)	Qual	Date Analyzed /Analyst	Test Method
	Total (ug)	Front (ug)	Back (ug)	(mg/m3)	(ppm)				
Client ID: STAGING-BAP 11 Lab ID: 1503F80-001A Date Sampled: 3/16/2015 Media: Filter/Charcoal Air Vol.(L): 2400									
1-Methylnaphthalene	<5	<5	<5	<0.0021	<0.00036	5	3/18/2015	RUF	N5506
2-Methylnaphthalene	<5	<5	<5	<0.0021	<0.00036	5	3/18/2015	RUF	N5506
Acenaphthene	<5	<5	<5	<0.0021	<0.00033	5	3/18/2015	RUF	N5506
Acenaphthylene	<5	<5	<5	<0.0021	<0.00034	5	3/18/2015	RUF	N5506
Anthracene	<1	<1	<1	<0.00042	<0.000057	1	3/18/2015	RUF	N5506
Benzo(a)anthracene	<0.5	<0.5	<0.5	<0.00021	<0.000022	0.5	3/18/2015	RUF	N5506
Benzo(a)pyrene	<1	<1	<1	<0.00042	<0.000040	1	3/18/2015	RUF	N5506
Benzo(b)fluoranthene	<1	<1	<1	<0.00042	<0.000040	1	3/18/2015	RUF	N5506
Benzo(g,h,i)perylene	<1	<1	<1	<0.00042	<0.000037	1	3/18/2015	RUF	N5506
Benzo(k)fluoranthene	<1	<1	<1	<0.00042	<0.000040	1	3/18/2015	RUF	N5506
Chrysene	<1	<1	<1	<0.00042	<0.000045	1	3/18/2015	RUF	N5506
Dibenz(a,h)anthracene	<1	<1	<1	<0.00042	<0.000037	1	3/18/2015	RUF	N5506
Fluoranthene	<1	<1	<1	<0.00042	<0.000050	1	3/18/2015	RUF	N5506
Fluorene	<2.5	<2.5	<2.5	<0.0010	<0.00015	2.5	3/18/2015	RUF	N5506
Indeno(1,2,3-cd)pyrene	<1	<1	<1	<0.00042	<0.000037	1	3/18/2015	RUF	N5506
Naphthalene	<5	<5	<5	<0.0021	<0.00040	5	3/18/2015	RUF	N5506
Phenanthrene	<2.5	<2.5	<2.5	<0.0010	<0.00014	2.5	3/18/2015	RUF	N5506
Pyrene	<1	<1	<1	<0.00042	<0.000050	1	3/18/2015	RUF	N5506

Qualifiers:

< Less than the indicated limit of detection (LOD)

H Holding time for preparation or analysis

B Analyte detected in the associated Method Blank

(a) Analysis indicates possible breakthrough; back section result is greater than

30 % of the front section result.

Analytical Environmental Services, Inc

Date: 23-Mar-15

Client: Oneida Total Integrated Enterprises
Lab Order 1503F80
Project Name: 35 Avenue Removal
Lab ID: 1503F80-001A

Client Sample ID: STAGING-BAP 11
Tag Number:
Collection Date: 3/16/2015
Matrix: Air

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
NIOSH 5506 (N5506)									
1-Methylnaphthalene	BRL		0.20	5.0	ug, Total	204631	1	03/18/2015 18:13	RF
2-Methylnaphthalene	BRL		0.44	5.0	ug, Total	204631	1	03/18/2015 18:13	RF
Acenaphthene	BRL		1.3	5.0	ug, Total	204631	1	03/18/2015 18:13	RF
Acenaphthylene	BRL		0.57	5.0	ug, Total	204631	1	03/18/2015 18:13	RF
Anthracene	BRL		0.030	1.0	ug, Total	204631	1	03/18/2015 18:13	RF
Benzo(a)anthracene	BRL		0.028	0.50	ug, Total	204631	1	03/18/2015 18:13	RF
Benzo(a)pyrene	BRL		0.026	1.0	ug, Total	204631	1	03/18/2015 18:13	RF
Benzo(b)fluoranthene	BRL		0.042	1.0	ug, Total	204631	1	03/18/2015 18:13	RF
Benzo(g,h,i)perylene	BRL		0.077	1.0	ug, Total	204631	1	03/18/2015 18:13	RF
Benzo(k)fluoranthene	BRL		0.027	1.0	ug, Total	204631	1	03/18/2015 18:13	RF
Chrysene	BRL		0.020	1.0	ug, Total	204631	1	03/18/2015 18:13	RF
Dibenz(a,h)anthracene	BRL		0.080	1.0	ug, Total	204631	1	03/18/2015 18:13	RF
Fluoranthene	BRL		0.048	1.0	ug, Total	204631	1	03/18/2015 18:13	RF
Fluorene	BRL		0.064	2.5	ug, Total	204631	1	03/18/2015 18:13	RF
Indeno(1,2,3-cd)pyrene	BRL		0.035	1.0	ug, Total	204631	1	03/18/2015 18:13	RF
Naphthalene	BRL		0.25	5.0	ug, Total	204631	1	03/18/2015 18:13	RF
Phenanthrene	BRL		0.026	2.5	ug, Total	204631	1	03/18/2015 18:13	RF
Pyrene	BRL		0.027	1.0	ug, Total	204631	1	03/18/2015 18:13	RF

Qualifiers: * Value exceeds maximum contaminant level
 BRL Not Detected at MDL
 H Holding times for preparation or analysis exceeded
 N Analyte not NELAC certified
 B Analyte detected in the associated method blank

E Estimated value above quantitation range
 S Spike Recovery outside limits due to matrix
 > Greater than Result value
 J Estimated value detected below Reporting Limit
 < Less than Result value

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client OTIE

Work Order Number 1503F80

Checklist completed by [Signature] 3/17/15
Signature Date

Carrier name: FedEx ☒ UPS ☐ Courier ☐ Client ☐ US Mail ☐ Other ☐

Shipping container/cooler in good condition? Yes ☒ No ☐ Not Present ☐

Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Present ☒

Custody seals intact on sample bottles? EM Yes ☐ No ☐ Not Present ☒
3/17/15

Container/Temp Blank temperature in compliance? (0°-6°C) Yes ☒ No ☐

Cooler #1 AMB Cooler #2 ☐ Cooler #3 ☐ Cooler #4 ☐ Cooler #5 ☐ Cooler #6 ☐

Chain of custody present? Yes ☒ No ☐

Chain of custody signed when relinquished and received? Yes ☒ No ☐

Chain of custody agrees with sample labels? Yes ☒ No ☐

Samples in proper container/bottle? Yes ☒ No ☐

Sample containers intact? Yes ☒ No ☐

Sufficient sample volume for indicated test? Yes ☒ No ☐

All samples received within holding time? Yes ☒ No ☐

Was TAT marked on the COC? Yes ☐ No ☒

Proceed with Standard TAT as per project history? Yes ☒ No ☐ Not Applicable ☐

Water - VOA vials have zero headspace? No VOA vials submitted ☒ Yes ☐ No ☐

Water - pH acceptable upon receipt? Yes ☐ No ☐ Not Applicable ☒

Adjusted? ☐ Checked by ☐

Sample Condition: Good ☒ Other(Explain) ☐

(For diffusive samples or AIHA lead) Is a known blank included? Yes ☐ No ☒

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

Client: Oneida Total Integrated Enterprises
Project Name: 35 Avenue Removal
Workorder: 1503F80

ANALYTICAL QC SUMMARY REPORT**BatchID: 204631**

Sample ID: MB-204631	Client ID:					Units: ug, Total	Prep Date: 03/18/2015	Run No: 287987			
SampleType: MBLK	TestCode: NIOSH 5506					BatchID: 204631	Analysis Date: 03/18/2015	Seq No: 6117569			
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1-Methylnaphthalene	BRL	5.0									
2-Methylnaphthalene	BRL	5.0									
Acenaphthene	BRL	5.0									
Acenaphthylene	BRL	5.0									
Anthracene	BRL	1.0									
Benzo(a)anthracene	BRL	0.50									
Benzo(a)pyrene	BRL	1.0									
Benzo(b)fluoranthene	BRL	1.0									
Benzo(g,h,i)perylene	BRL	1.0									
Benzo(k)fluoranthene	BRL	1.0									
Chrysene	BRL	1.0									
Dibenz(a,h)anthracene	BRL	1.0									
Fluoranthene	BRL	1.0									
Fluorene	BRL	2.5									
Indeno(1,2,3-cd)pyrene	BRL	1.0									
Naphthalene	BRL	5.0									
Phenanthrene	BRL	2.5									
Pyrene	BRL	1.0									

Sample ID: LCS-204631		Client ID:				Units: ug, Total		Prep Date: 03/18/2015		Run No: 287987	
SampleType: LCS		TestCode: NIOSH 5506				BatchID: 204631		Analysis Date: 03/18/2015		Seq No: 6117570	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1-Methylnaphthalene	23.67	5.0	25.00		94.7	80.3	120				
2-Methylnaphthalene	23.11	5.0	25.00		92.5	80	120				
Acenaphthene	23.88	5.0	25.00		95.5	80	120				
Acenaphthylene	48.07	5.0	50.00		96.1	80.4	120				

Qualifiers:	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Oneida Total Integrated Enterprises
Project Name: 35 Avenue Removal
Workorder: 1503F80

ANALYTICAL QC SUMMARY REPORT**BatchID: 204631**

Sample ID: LCS-204631	Client ID:	Units: ug, Total				Prep Date: 03/18/2015	Run No: 287987				
SampleType: LCS	TestCode: NIOSH 5506	BatchID: 204631				Analysis Date: 03/18/2015	Seq No: 6117570				
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Anthracene	2.014	1.0	2.500		80.6	75	120				
Benzo(a)anthracene	2.049	0.50	2.500		81.9	71.7	120				
Benzo(a)pyrene	1.688	1.0	2.500		67.5	60	120				
Benzo(b)fluoranthene	3.945	1.0	5.000		78.9	66.6	120				
Benzo(g,h,i)perylene	3.169	1.0	5.000		63.4	48.8	120				
Benzo(k)fluoranthene	1.924	1.0	2.500		77.0	64.2	120				
Chrysene	2.053	1.0	2.500		82.1	71	120				
Dibenz(a,h)anthracene	3.599	1.0	5.000		72.0	58.9	120				
Fluoranthene	4.453	1.0	5.000		89.1	76.8	120				
Fluorene	4.781	2.5	5.000		95.6	78	120				
Indeno(1,2,3-cd)pyrene	1.583	1.0	2.500		63.3	55.4	120				
Naphthalene	24.57	5.0	25.00		98.3	80	116				
Phenanthrene	BRL	2.5	2.500		91.6	80	120				
Pyrene	2.057	1.0	2.500		82.3	74.4	120				

Sample ID: LCSD-204631	Client ID:				Units: ug, Total	Prep Date: 03/18/2015	Run No: 287987				
SampleType: LCSD	TestCode: NIOSH 5506				BatchID: 204631	Analysis Date: 03/18/2015	Seq No: 6117571				
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1-Methylnaphthalene	23.38	5.0	25.00		93.5	80.3	120	23.67	1.21	20	
2-Methylnaphthalene	22.94	5.0	25.00		91.7	80	120	23.11	0.771	20	
Acenaphthene	23.70	5.0	25.00		94.8	80	120	23.88	0.762	20	
Acenaphthylene	49.25	5.0	50.00		98.5	80.4	120	48.07	2.42	20	
Anthracene	1.995	1.0	2.500		79.8	75	120	2.014	0.961	20	
Benzo(a)anthracene	2.018	0.50	2.500		80.7	71.7	120	2.049	1.49	20	
Benzo(a)pyrene	1.629	1.0	2.500		65.2	60	120	1.688	3.55	20	
Benzo(b)fluoranthene	3.830	1.0	5.000		76.6	66.6	120	3.945	2.97	20	
Benzo(g,h,i)perylene	3.070	1.0	5.000		61.4	48.8	120	3.169	3.16	20.8	

Qualifiers:	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Oneida Total Integrated Enterprises
Project Name: 35 Avenue Removal
Workorder: 1503F80

ANALYTICAL QC SUMMARY REPORT

BatchID: 204631

Sample ID: LCSD-204631	Client ID:	Units: ug, Total					Prep Date: 03/18/2015	Run No: 287987			
SampleType: LCSD	TestCode: NIOSH 5506	BatchID: 204631					Analysis Date: 03/18/2015	Seq No: 6117571			
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Benzo(k)fluoranthene	1.873	1.0	2.500		74.9	64.2	120	1.924	2.71	20	
Chrysene	2.015	1.0	2.500		80.6	71	120	2.053	1.87	20	
Dibenz(a,h)anthracene	3.556	1.0	5.000		71.1	58.9	120	3.599	1.21	16.6	
Fluoranthene	4.375	1.0	5.000		87.5	76.8	120	4.453	1.78	20	
Fluorene	4.711	2.5	5.000		94.2	78	120	4.781	1.48	20	
Indeno(1,2,3-cd)pyrene	1.546	1.0	2.500		61.9	55.4	120	1.583	2.32	20	
Naphthalene	24.55	5.0	25.00		98.2	80	116	24.57	0.063	20	
Phenanthrene	BRL	2.5	2.500		90.4	80	120	2.290	0	20	
Pyrene	2.009	1.0	2.500		80.4	74.4	120	2.057	2.35	20	

Qualifiers:	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

May 28, 2015

Russell Henderson
Oneida Total Integrated Enterprises
1220 Kennestone Circle, Suite 106
Marietta GA 30066

TEL: (678) 355-5550

FAX: (414) 257-2492

RE: 35 Ave Removal

Dear Russell Henderson:

Order No: 1505J14

Analytical Environmental Services, Inc. received 1 samples on 5/20/2015 10:30:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

- NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
- AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Dorothy deBruyn
Project Manager

3080 Presidential Drive, Atlanta, GA 30340-3704

Tel.: (770) 457-8177 (800) 972-4889

1505314

Client Name: OTIE Contact: Russell Henderson
Address: _____ Phone: 678-255-6156



Fax: _____

Project Name/#: 35th Ave Removal
 Samplers Name: Doug Franky
 Sampling Date: 5/19/2015

[illegible]

Turnaround Time: Normal (5 days): ☒ 3 Days Rush: ☐ 2 Days Rush: ☐ Next Day Rush: ☐

Comments:

Relinquished By:		Date/Time	5/19/2015 1630
Received By:		Date/Time	
Relinquished By:		Date/Time	
Received By:		Date/Time	

Delivered Direct to Lab: ☒ Shipped: ☐

Method of Shipment: FED Ex

Lab Recipient: Cataya Reel 2 of 8

Date: 05/20/15 10:30a

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE FOLLOWING BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.

Analytical Results

for

Oneida Total Integrated Enterprises

Date: 28-May-15

Workorder: 1505J14

Client Reference: 35 Ave Removal

Analyte	Concentration					Limit of Detection (ug)	Qual	Date Analyzed /Analyst	Test Method
	Total (ug)	Front (ug)	Back (ug)	(mg/m3)	(ppm)				
Client ID: STAGING-BAP12 Lab ID: 1505J14-001A Date Sampled: 5/19/2015 Media: Filter/Charcoal Air Vol.(L): 2400									
1-Methylnaphthalene	<5	<5	<5	<0.0021	<0.00036	5		5/21/2015 RUF	N5506
2-Methylnaphthalene	<5	<5	<5	<0.0021	<0.00036	5		5/21/2015 RUF	N5506
Acenaphthene	<5	<5	<5	<0.0021	<0.00033	5		5/21/2015 RUF	N5506
Acenaphthylene	<5	<5	<5	<0.0021	<0.00034	5		5/21/2015 RUF	N5506
Anthracene	<1	<1	<1	<0.00042	<0.000057	1		5/21/2015 RUF	N5506
Benzo(a)anthracene	<0.5	<0.5	<0.5	<0.00021	<0.000022	0.5		5/21/2015 RUF	N5506
Benzo(a)pyrene	<1	<1	<1	<0.00042	<0.000040	1		5/21/2015 RUF	N5506
Benzo(b)fluoranthene	<1	<1	<1	<0.00042	<0.000040	1		5/21/2015 RUF	N5506
Benzo(g,h,i)perylene	<1	<1	<1	<0.00042	<0.000037	1		5/21/2015 RUF	N5506
Benzo(k)fluoranthene	<1	<1	<1	<0.00042	<0.000040	1		5/21/2015 RUF	N5506
Chrysene	<1	<1	<1	<0.00042	<0.000045	1		5/21/2015 RUF	N5506
Dibenz(a,h)anthracene	<1	<1	<1	<0.00042	<0.000037	1		5/21/2015 RUF	N5506
Fluoranthene	<1	<1	<1	<0.00042	<0.000050	1		5/21/2015 RUF	N5506
Fluorene	<2.5	<2.5	<2.5	<0.0010	<0.00015	2.5		5/21/2015 RUF	N5506
Indeno(1,2,3-cd)pyrene	<1	<1	<1	<0.00042	<0.000037	1		5/21/2015 RUF	N5506
Naphthalene	<5	<5	<5	<0.0021	<0.00040	5		5/21/2015 RUF	N5506
Phenanthrene	<2.5	<2.5	<2.5	<0.0010	<0.00014	2.5		5/21/2015 RUF	N5506
Pyrene	<1	<1	<1	<0.00042	<0.000050	1		5/21/2015 RUF	N5506

Qualifiers:

< Less than the indicated limit of detection (LOD)

H Holding time for preparation or analysis

B Analyte detected in the associated Method Blank

(a) Analysis indicates possible breakthrough; back section result is greater than

30 % of the front section result.

Analytical Environmental Services, Inc

Date: 28-May-15

Client: Oneida Total Integrated Enterprises
Lab Order 1505J14
Project Name: 35 Ave Removal
Lab ID: 1505J14-001A

Client Sample ID: STAGING-BAP12
Tag Number:
Collection Date: 5/19/2015
Matrix: Air

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
NIOSH 5506 (N5506)									
1-Methylnaphthalene	BRL		0.20	5.0	ug, Total	207759	1	05/21/2015 23:04	RF
2-Methylnaphthalene	BRL		0.44	5.0	ug, Total	207759	1	05/21/2015 23:04	RF
Acenaphthene	BRL		1.3	5.0	ug, Total	207759	1	05/21/2015 23:04	RF
Acenaphthylene	BRL		0.57	5.0	ug, Total	207759	1	05/21/2015 23:04	RF
Anthracene	BRL		0.030	1.0	ug, Total	207759	1	05/21/2015 23:04	RF
Benzo(a)anthracene	BRL		0.028	0.50	ug, Total	207759	1	05/21/2015 23:04	RF
Benzo(a)pyrene	BRL		0.026	1.0	ug, Total	207759	1	05/21/2015 23:04	RF
Benzo(b)fluoranthene	BRL		0.042	1.0	ug, Total	207759	1	05/21/2015 23:04	RF
Benzo(g,h,i)perylene	BRL		0.077	1.0	ug, Total	207759	1	05/21/2015 23:04	RF
Benzo(k)fluoranthene	BRL		0.027	1.0	ug, Total	207759	1	05/21/2015 23:04	RF
Chrysene	BRL		0.020	1.0	ug, Total	207759	1	05/21/2015 23:04	RF
Dibenz(a,h)anthracene	BRL		0.080	1.0	ug, Total	207759	1	05/21/2015 23:04	RF
Fluoranthene	BRL		0.048	1.0	ug, Total	207759	1	05/21/2015 23:04	RF
Fluorene	BRL		0.064	2.5	ug, Total	207759	1	05/21/2015 23:04	RF
Indeno(1,2,3-cd)pyrene	BRL		0.035	1.0	ug, Total	207759	1	05/21/2015 23:04	RF
Naphthalene	BRL		0.25	5.0	ug, Total	207759	1	05/21/2015 23:04	RF
Phenanthrene	BRL		0.026	2.5	ug, Total	207759	1	05/21/2015 23:04	RF
Pyrene	BRL		0.027	1.0	ug, Total	207759	1	05/21/2015 23:04	RF

Qualifiers: * Value exceeds maximum contaminant level
 BRL Not Detected at MDL
 H Holding times for preparation or analysis exceeded
 N Analyte not NELAC certified
 B Analyte detected in the associated method blank

E Estimated value above quantitation range
 S Spike Recovery outside limits due to matrix
 > Greater than Result value
 J Estimated value detected below Reporting Limit
 < Less than Result value

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client OTIE

Work Order Number 1505 J14

Checklist completed by *Maryje* 5/20/15
Signature Date

Carrier name: FedEx ☒ UPS ☐ Courier ☐ Client ☐ US Mail ☐ Other ☐

Shipping container/cooler in good condition? Yes ☒ No ☐ Not Present ☐

Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Present ☒

Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒

Container/Temp Blank temperature in compliance? ($0^{\circ} \leq 6^{\circ}C$) * Yes ☒ No ☐

Cooler #1 Under Cooler #2 ☐ Cooler #3 ☐ Cooler #4 ☐ Cooler #5 ☐ Cooler #6 ☐

Chain of custody present? Yes ☒ No ☐

Chain of custody signed when relinquished and received? Yes ☒ No ☐

Chain of custody agrees with sample labels? Yes ☒ No ☐

Samples in proper container/bottle? Yes ☒ No ☐

Sample containers intact? Yes ☒ No ☐

Sufficient sample volume for indicated test? Yes ☒ No ☐

All samples received within holding time? Yes ☒ No ☐

Was TAT marked on the COC? Yes ☒ No ☐

Proceed with Standard TAT as per project history? Yes ☐ No ☐ Not Applicable ☒

Water - VOA vials have zero headspace? No VOA vials submitted ☒ Yes ☐ No ☐

Water - pH acceptable upon receipt? Yes ☐ No ☐ Not Applicable ☒

Adjusted? ☐ Checked by ☐

Sample Condition: Good ☒ Other(Explain) ☐

(For diffusive samples or AIHA lead) Is a known blank included? Yes ☐ No ☒

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\\Sample Receipt\\My Documents\\COCs and pH Adjustment Sheet\\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Client: Oneida Total Integrated Enterprises
Project Name: 35 Ave Removal
Workorder: 1505J14

ANALYTICAL QC SUMMARY REPORT

BatchID: 207759

Sample ID: MB-207759					Client ID:			Units: ug, Total		Prep Date: 05/21/2015		Run No: 292417	
SampleType: MBLK					TestCode: NIOSH 5506			BatchID: 207759		Analysis Date: 05/21/2015		Seq No: 6225421	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual		

1-Methylnaphthalene	BRL	5.0									
2-Methylnaphthalene	BRL	5.0									
Acenaphthene	BRL	5.0									
Acenaphthylene	BRL	5.0									
Anthracene	BRL	1.0									
Benzo(a)anthracene	BRL	0.50									
Benzo(a)pyrene	BRL	1.0									
Benzo(b)fluoranthene	BRL	1.0									
Benzo(g,h,i)perylene	BRL	1.0									
Benzo(k)fluoranthene	BRL	1.0									
Chrysene	BRL	1.0									
Dibenz(a,h)anthracene	BRL	1.0									
Fluoranthene	BRL	1.0									
Fluorene	BRL	2.5									
Indeno(1,2,3-cd)pyrene	BRL	1.0									
Naphthalene	BRL	5.0									
Phenanthrene	BRL	2.5									
Pyrene	BRL	1.0									

Sample ID: LCS-207759					Client ID:		Units: ug, Total		Prep Date: 05/21/2015		Run No: 292417	
SampleType: LCS					TestCode: NIOSH 5506		BatchID: 207759		Analysis Date: 05/21/2015		Seq No: 6225422	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual	

1-Methylnaphthalene	23.65	5.0	25.00		94.6	80.3	120				
2-Methylnaphthalene	22.92	5.0	25.00		91.7	80	120				
Acenaphthene	24.49	5.0	25.00		97.9	80	120				
Acenaphthylene	48.01	5.0	50.00		96.0	80.4	120				

Qualifiers:	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Oneida Total Integrated Enterprises
Project Name: 35 Ave Removal
Workorder: 1505J14

ANALYTICAL QC SUMMARY REPORT**BatchID: 207759**

Sample ID: LCS-207759	Client ID:	Units: ug, Total				Prep Date: 05/21/2015	Run No: 292417				
SampleType: LCS	TestCode: NIOSH 5506	BatchID: 207759				Analysis Date: 05/21/2015	Seq No: 6225422				
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Anthracene	2.074	1.0	2.500		83.0	75	120				
Benzo(a)anthracene	2.045	0.50	2.500		81.8	71.7	120				
Benzo(a)pyrene	1.746	1.0	2.500		69.9	60	120				
Benzo(b)fluoranthene	3.794	1.0	5.000		75.9	66.6	120				
Benzo(g,h,i)perylene	3.226	1.0	5.000		64.5	48.8	120				
Benzo(k)fluoranthene	1.875	1.0	2.500		75.0	64.2	120				
Chrysene	2.033	1.0	2.500		81.3	71	120				
Dibenz(a,h)anthracene	3.484	1.0	5.000		69.7	58.9	120				
Fluoranthene	4.425	1.0	5.000		88.5	76.8	120				
Fluorene	4.813	2.5	5.000		96.3	78	120				
Indeno(1,2,3-cd)pyrene	1.639	1.0	2.500		65.6	55.4	120				
Naphthalene	24.35	5.0	25.00		97.4	80	116				
Phenanthrene	BRL	2.5	2.500		89.2	80	120				
Pyrene	2.104	1.0	2.500		84.2	74.4	120				

Sample ID: LCSD-207759	Client ID:	Units: ug, Total				Prep Date: 05/21/2015	Run No: 292417				
SampleType: LCSD	TestCode: NIOSH 5506	BatchID: 207759				Analysis Date: 05/21/2015	Seq No: 6225423				
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1-Methylnaphthalene	23.94	5.0	25.00		95.8	80.3	120	23.65	1.22	20	
2-Methylnaphthalene	23.23	5.0	25.00		92.9	80	120	22.92	1.33	20	
Acenaphthene	24.53	5.0	25.00		98.1	80	120	24.49	0.195	20	
Acenaphthylene	48.29	5.0	50.00		96.6	80.4	120	48.01	0.578	20	
Anthracene	2.089	1.0	2.500		83.5	75	120	2.074	0.690	20	
Benzo(a)anthracene	2.065	0.50	2.500		82.6	71.7	120	2.045	0.973	20	
Benzo(a)pyrene	1.767	1.0	2.500		70.7	60	120	1.746	1.17	20	
Benzo(b)fluoranthene	3.807	1.0	5.000		76.1	66.6	120	3.794	0.346	20	
Benzo(g,h,i)perylene	3.263	1.0	5.000		65.3	48.8	120	3.226	1.13	20.8	

Qualifiers:	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Oneida Total Integrated Enterprises
Project Name: 35 Ave Removal
Workorder: 1505J14

ANALYTICAL QC SUMMARY REPORT

BatchID: 207759

Sample ID: LCSD-207759	Client ID:	Units: ug, Total				Prep Date: 05/21/2015	Run No: 292417				
SampleType: LCSD	TestCode: NIOSH 5506	BatchID: 207759				Analysis Date: 05/21/2015	Seq No: 6225423				
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Benzo(k)fluoranthene	1.888	1.0	2.500		75.5	64.2	120	1.875	0.707	20	
Chrysene	2.047	1.0	2.500		81.9	71	120	2.033	0.673	20	
Dibenz(a,h)anthracene	3.505	1.0	5.000		70.1	58.9	120	3.484	0.597	16.6	
Fluoranthene	4.469	1.0	5.000		89.4	76.8	120	4.425	0.990	20	
Fluorene	4.843	2.5	5.000		96.9	78	120	4.813	0.626	20	
Indeno(1,2,3-cd)pyrene	1.650	1.0	2.500		66.0	55.4	120	1.639	0.682	20	
Naphthalene	24.40	5.0	25.00		97.6	80	116	24.35	0.224	20	
Phenanthrene	BRL	2.5	2.500		90.1	80	120	2.231	0	20	
Pyrene	2.129	1.0	2.500		85.1	74.4	120	2.104	1.17	20	

Qualifiers:	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

May 28, 2015

Russell Henderson
Oneida Total Integrated Enterprises
1220 Kennestone Circle, Suite 106
Marietta GA 30066

TEL: (678) 355-5550

FAX: (414) 257-2492

RE: 35 Ave Removal

Dear Russell Henderson:

Order No: 1505J24

Analytical Environmental Services, Inc. received 1 samples on 5/21/2015 10:30:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

- NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
- AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Dorothy deBruyn
Project Manager

1505J24

Project Name/ #: 35th Ave Removal
 Samplers Name: Doug Forder
 Sampling Date: 5/20/2015

[illegible]

Comments:

Relinquished By:		Date/Time	
Received By:		Date/Time	
Relinquished By:		Date/Time	
Received By:		Date/Time	

Delivered Direct to Lab: ☐ Shipped: ☐
 Method of Shipment: Radio
 Lab Recipient: Mr. J. 5/21/15, B-22
 Date: 5/21/15

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE FOLLOWING BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.

Analytical Results

for

Oneida Total Integrated Enterprises

Date: 28-May-15

Workorder: 1505J24

Client Reference: 35 Ave Removal

Analyte	Concentration					Limit of Detection (ug)	Qual	Date Analyzed /Analyst	Test Method
	Total (ug)	Front (ug)	Back (ug)	(mg/m3)	(ppm)				
Client ID: CV0045B-BA-P01 Lab ID: 1505J24-001A Date Sampled: 5/20/2015 Media: Filter/Charcoal Air Vol.(L): 2400									
1-Methylnaphthalene	<5	<5	<5	<0.0021	<0.00036	5	5/22/2015	RUF	N5506
2-Methylnaphthalene	<5	<5	<5	<0.0021	<0.00036	5	5/22/2015	RUF	N5506
Acenaphthene	<5	<5	<5	<0.0021	<0.00033	5	5/22/2015	RUF	N5506
Acenaphthylene	<5	<5	<5	<0.0021	<0.00034	5	5/22/2015	RUF	N5506
Anthracene	<1	<1	<1	<0.00042	<0.000057	1	5/22/2015	RUF	N5506
Benzo(a)anthracene	<0.5	<0.5	<0.5	<0.00021	<0.000022	0.5	5/22/2015	RUF	N5506
Benzo(a)pyrene	<1	<1	<1	<0.00042	<0.000040	1	5/22/2015	RUF	N5506
Benzo(b)fluoranthene	<1	<1	<1	<0.00042	<0.000040	1	5/22/2015	RUF	N5506
Benzo(g,h,i)perylene	<1	<1	<1	<0.00042	<0.000037	1	5/22/2015	RUF	N5506
Benzo(k)fluoranthene	<1	<1	<1	<0.00042	<0.000040	1	5/22/2015	RUF	N5506
Chrysene	<1	<1	<1	<0.00042	<0.000045	1	5/22/2015	RUF	N5506
Dibenz(a,h)anthracene	<1	<1	<1	<0.00042	<0.000037	1	5/22/2015	RUF	N5506
Fluoranthene	<1	<1	<1	<0.00042	<0.000050	1	5/22/2015	RUF	N5506
Fluorene	<2.5	<2.5	<2.5	<0.0010	<0.00015	2.5	5/22/2015	RUF	N5506
Indeno(1,2,3-cd)pyrene	<1	<1	<1	<0.00042	<0.000037	1	5/22/2015	RUF	N5506
Naphthalene	<5	<5	<5	<0.0021	<0.00040	5	5/22/2015	RUF	N5506
Phenanthrene	<2.5	<2.5	<2.5	<0.0010	<0.00014	2.5	5/22/2015	RUF	N5506
Pyrene	<1	<1	<1	<0.00042	<0.000050	1	5/22/2015	RUF	N5506

Qualifiers:

< Less than the indicated limit of detection (LOD)

H Holding time for preparation or analysis

B Analyte detected in the associated Method Blank

(a) Analysis indicates possible breakthrough; back section result is greater than

30 % of the front section result.

Analytical Environmental Services, Inc
Date: 28-May-15

Client: Oneida Total Integrated Enterprises
Project Name: 35 Ave Removal
Lab ID: 1505J24-001

Client Sample ID: CV0045B-BA-P01
Collection Date: 5/20/2015
Matrix: Air

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
NIOSH 5506				(N5506)					
1-Methylnaphthalene	BRL		0.20	5.0	ug, Total	207759	1	05/22/2015 00:04	RF
2-Methylnaphthalene	BRL		0.44	5.0	ug, Total	207759	1	05/22/2015 00:04	RF
Acenaphthene	BRL		1.3	5.0	ug, Total	207759	1	05/22/2015 00:04	RF
Acenaphthylene	BRL		0.57	5.0	ug, Total	207759	1	05/22/2015 00:04	RF
Anthracene	BRL		0.030	1.0	ug, Total	207759	1	05/22/2015 00:04	RF
Benzo(a)anthracene	BRL		0.028	0.50	ug, Total	207759	1	05/22/2015 00:04	RF
Benzo(a)pyrene	BRL		0.026	1.0	ug, Total	207759	1	05/22/2015 00:04	RF
Benzo(b)fluoranthene	BRL		0.042	1.0	ug, Total	207759	1	05/22/2015 00:04	RF
Benzo(g,h,i)perylene	BRL		0.077	1.0	ug, Total	207759	1	05/22/2015 00:04	RF
Benzo(k)fluoranthene	BRL		0.027	1.0	ug, Total	207759	1	05/22/2015 00:04	RF
Chrysene	BRL		0.020	1.0	ug, Total	207759	1	05/22/2015 00:04	RF
Dibenz(a,h)anthracene	BRL		0.080	1.0	ug, Total	207759	1	05/22/2015 00:04	RF
Fluoranthene	BRL		0.048	1.0	ug, Total	207759	1	05/22/2015 00:04	RF
Fluorene	BRL		0.064	2.5	ug, Total	207759	1	05/22/2015 00:04	RF
Indeno(1,2,3-cd)pyrene	BRL		0.035	1.0	ug, Total	207759	1	05/22/2015 00:04	RF
Naphthalene	BRL		0.25	5.0	ug, Total	207759	1	05/22/2015 00:04	RF
Phenanthrene	BRL		0.026	2.5	ug, Total	207759	1	05/22/2015 00:04	RF
Pyrene	BRL		0.027	1.0	ug, Total	207759	1	05/22/2015 00:04	RF

Qualifiers: * Value exceeds maximum contaminant level
 BRL Not detected at MDL
 H Holding times for preparation or analysis exceeded
 N Analyte not NELAC certified
 B Analyte detected in the associated method blank
 NC Not confirmed

E Estimated value above quantitation range
 S Spike Recovery outside limits due to matrix
 J Estimated value detected below Reporting Limit
 > Greater than Result value
 < Less than Result value
 Narr See case narrative

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client OTIE Work Order Number 1505 J24

Checklist completed by M. Wolfe 5/11/15
Signature Date

Carrier name: FedEx ☒ UPS ☐ Courier ☐ Client ☐ US Mail ☐ Other ☐

Shipping container/cooler in good condition? Yes ☒ No ☐ Not Present ☐

Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Present ☒

Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒

Container/Temp Blank temperature in compliance? ($0^{\circ} \leq 6^{\circ}C$)* Yes ☒ No ☐

Cooler #1 Amulet Cooler #2 ☐ Cooler #3 ☐ Cooler #4 ☐ Cooler #5 ☐ Cooler #6 ☐

Chain of custody present? Yes ☒ No ☐

Chain of custody signed when relinquished and received? Yes ☐ No ☒

Chain of custody agrees with sample labels? Yes ☒ No ☐

Samples in proper container/bottle? Yes ☒ No ☐

Sample containers intact? Yes ☒ No ☐

Sufficient sample volume for indicated test? Yes ☒ No ☐

All samples received within holding time? Yes ☒ No ☐

Was TAT marked on the COC? Yes ☒ No ☐

Proceed with Standard TAT as per project history? Yes ☐ No ☐ Not Applicable ☒

Water - VOA vials have zero headspace? No VOA vials submitted ☒ Yes ☐ No ☐

Water - pH acceptable upon receipt? Yes ☐ No ☐ Not Applicable ☒

Adjusted? ☐ Checked by ☐

Sample Condition: Good ☒ Other(Explain) ☐

(For diffusive samples or AIHA lead) Is a known blank included? Yes ☐ No ☒

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

Client: Oneida Total Integrated Enterprises
Project Name: 35 Ave Removal
Workorder: 1505J24

ANALYTICAL QC SUMMARY REPORT

BatchID: 207759

Sample ID: MB-207759					Client ID:			Units: ug, Total		Prep Date: 05/21/2015		Run No: 292417				
SampleType: MBLK					TestCode: NIOSH 5506			BatchID: 207759		Analysis Date: 05/21/2015		Seq No: 6225421				
Analyte					Result		RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1-Methylnaphthalene	BRL	5.0									
2-Methylnaphthalene	BRL	5.0									
Acenaphthene	BRL	5.0									
Acenaphthylene	BRL	5.0									
Anthracene	BRL	1.0									
Benzo(a)anthracene	BRL	0.50									
Benzo(a)pyrene	BRL	1.0									
Benzo(b)fluoranthene	BRL	1.0									
Benzo(g,h,i)perylene	BRL	1.0									
Benzo(k)fluoranthene	BRL	1.0									
Chrysene	BRL	1.0									
Dibenz(a,h)anthracene	BRL	1.0									
Fluoranthene	BRL	1.0									
Fluorene	BRL	2.5									
Indeno(1,2,3-cd)pyrene	BRL	1.0									
Naphthalene	BRL	5.0									
Phenanthrene	BRL	2.5									
Pyrene	BRL	1.0									

Sample ID: LCS-207759					Client ID:		Units: ug, Total		Prep Date: 05/21/2015		Run No: 292417	
SampleType: LCS					TestCode: NIOSH 5506		BatchID: 207759		Analysis Date: 05/21/2015		Seq No: 6225422	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual	

1-Methylnaphthalene	23.65	5.0	25.00		94.6	80.3	120				
2-Methylnaphthalene	22.92	5.0	25.00		91.7	80	120				
Acenaphthene	24.49	5.0	25.00		97.9	80	120				
Acenaphthylene	48.01	5.0	50.00		96.0	80.4	120				

Qualifiers:	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Oneida Total Integrated Enterprises
Project Name: 35 Ave Removal
Workorder: 1505J24

ANALYTICAL QC SUMMARY REPORT**BatchID: 207759**

Sample ID: LCS-207759	Client ID:				Units: ug, Total	Prep Date: 05/21/2015	Run No: 292417				
SampleType: LCS	TestCode: NIOSH 5506				BatchID: 207759	Analysis Date: 05/21/2015	Seq No: 6225422				
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Anthracene	2.074	1.0	2.500		83.0	75	120				
Benzo(a)anthracene	2.045	0.50	2.500		81.8	71.7	120				
Benzo(a)pyrene	1.746	1.0	2.500		69.9	60	120				
Benzo(b)fluoranthene	3.794	1.0	5.000		75.9	66.6	120				
Benzo(g,h,i)perylene	3.226	1.0	5.000		64.5	48.8	120				
Benzo(k)fluoranthene	1.875	1.0	2.500		75.0	64.2	120				
Chrysene	2.033	1.0	2.500		81.3	71	120				
Dibenz(a,h)anthracene	3.484	1.0	5.000		69.7	58.9	120				
Fluoranthene	4.425	1.0	5.000		88.5	76.8	120				
Fluorene	4.813	2.5	5.000		96.3	78	120				
Indeno(1,2,3-cd)pyrene	1.639	1.0	2.500		65.6	55.4	120				
Naphthalene	24.35	5.0	25.00		97.4	80	116				
Phenanthrene	BRL	2.5	2.500		89.2	80	120				
Pyrene	2.104	1.0	2.500		84.2	74.4	120				

Sample ID: LCSD-207759	Client ID:				Units: ug, Total	Prep Date: 05/21/2015	Run No: 292417				
SampleType: LCSD	TestCode: NIOSH 5506				BatchID: 207759	Analysis Date: 05/21/2015	Seq No: 6225423				
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1-Methylnaphthalene	23.94	5.0	25.00		95.8	80.3	120	23.65	1.22	20	
2-Methylnaphthalene	23.23	5.0	25.00		92.9	80	120	22.92	1.33	20	
Acenaphthene	24.53	5.0	25.00		98.1	80	120	24.49	0.195	20	
Acenaphthylene	48.29	5.0	50.00		96.6	80.4	120	48.01	0.578	20	
Anthracene	2.089	1.0	2.500		83.5	75	120	2.074	0.690	20	
Benzo(a)anthracene	2.065	0.50	2.500		82.6	71.7	120	2.045	0.973	20	
Benzo(a)pyrene	1.767	1.0	2.500		70.7	60	120	1.746	1.17	20	
Benzo(b)fluoranthene	3.807	1.0	5.000		76.1	66.6	120	3.794	0.346	20	
Benzo(g,h,i)perylene	3.263	1.0	5.000		65.3	48.8	120	3.226	1.13	20.8	

Qualifiers:	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Oneida Total Integrated Enterprises
Project Name: 35 Ave Removal
Workorder: 1505J24

ANALYTICAL QC SUMMARY REPORT

BatchID: 207759

Sample ID: LCSD-207759		Client ID:			Units: ug, Total			Prep Date: 05/21/2015		Run No: 292417	
SampleType: LCSD		TestCode: NIOSH 5506			BatchID: 207759			Analysis Date: 05/21/2015		Seq No: 6225423	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Benzo(k)fluoranthene	1.888	1.0	2.500		75.5	64.2	120	1.875	0.707	20	
Chrysene	2.047	1.0	2.500		81.9	71	120	2.033	0.673	20	
Dibenz(a,h)anthracene	3.505	1.0	5.000		70.1	58.9	120	3.484	0.597	16.6	
Fluoranthene	4.469	1.0	5.000		89.4	76.8	120	4.425	0.990	20	
Fluorene	4.843	2.5	5.000		96.9	78	120	4.813	0.626	20	
Indeno(1,2,3-cd)pyrene	1.650	1.0	2.500		66.0	55.4	120	1.639	0.682	20	
Naphthalene	24.40	5.0	25.00		97.6	80	116	24.35	0.224	20	
Phenanthrene	BRL	2.5	2.500		90.1	80	120	2.231	0	20	
Pyrene	2.129	1.0	2.500		85.1	74.4	120	2.104	1.17	20	

Qualifiers:	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

June 22, 2015

Russell Henderson
Oneida Total Integrated Enterprises
1220 Kennestone Circle, Suite 106
Marietta GA 30066

TEL: (678) 355-5550

FAX: (414) 257-2492

RE: 35 Avenue Removal

Dear Russell Henderson:

Order No: 1506I55

Analytical Environmental Services, Inc. received 1 samples on 6/17/2015 10:30:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

- NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/15-06/30/16.
- AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Dorothy deBruyn
Project Manager

1506 ISS

Client Name: OTIE Contact: Russell Henderson
Address: 226 Kameron Cr. #106 Phone: 678-255-6191
Marietta, GA 30066 Fax: _____

Project Name/#: 35th Ave Removal
 Samplers Name: Doug Fruley
 Sampling Date: 6/16/2015

[illegible]

Normal (5 days):



3 Days Rush:



2 Days Rush:

Next Day Rush:

Relinquished By:

Received By:

Relinquished By:

Received By:

Date/Time

Date/Time

Date/Time

Date/Time

Delivered Direct to Lab:

Shipped:

10

Method of Shipment:

Lab Recipient:

Date:

FEDER

6/17 10:32

Received By: _____ Date/Time: _____

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE FOLLOWING BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.

Analytical Results

for

Oneida Total Integrated Enterprises

Date: 22-Jun-15

Workorder: 1506I55

Client Reference: 35 Avenue Removal

Analyte	Concentration					Limit of Detection (ug)	Qual	Date Analyzed /Analyst	Test Method
	Total (ug)	Front (ug)	Back (ug)	(mg/m3)	(ppm)				
Client ID: STAGING BAP 13 Lab ID: 1506I55-001A Date Sampled: 6/16/2015 Media: Filter/Charcoal Air Vol.(L): 2400									
1-Methylnaphthalene	<5	<5	<5	<0.0021	<0.00036	5	6/18/2015	RUF	N5506
2-Methylnaphthalene	<5	<5	<5	<0.0021	<0.00036	5	6/18/2015	RUF	N5506
Acenaphthene	<5	<5	<5	<0.0021	<0.00033	5	6/18/2015	RUF	N5506
Acenaphthylene	<5	<5	<5	<0.0021	<0.00034	5	6/18/2015	RUF	N5506
Anthracene	<1	<1	<1	<0.00042	<0.000057	1	6/18/2015	RUF	N5506
Benzo(a)anthracene	<0.5	<0.5	<0.5	<0.00021	<0.000022	0.5	6/18/2015	RUF	N5506
Benzo(a)pyrene	<1	<1	<1	<0.00042	<0.000040	1	6/18/2015	RUF	N5506
Benzo(b)fluoranthene	<1	<1	<1	<0.00042	<0.000040	1	6/18/2015	RUF	N5506
Benzo(g,h,i)perylene	<1	<1	<1	<0.00042	<0.000037	1	6/18/2015	RUF	N5506
Benzo(k)fluoranthene	<1	<1	<1	<0.00042	<0.000040	1	6/18/2015	RUF	N5506
Chrysene	<1	<1	<1	<0.00042	<0.000045	1	6/18/2015	RUF	N5506
Dibenz(a,h)anthracene	<1	<1	<1	<0.00042	<0.000037	1	6/18/2015	RUF	N5506
Fluoranthene	<1	<1	<1	<0.00042	<0.000050	1	6/18/2015	RUF	N5506
Fluorene	<2.5	<2.5	<2.5	<0.0010	<0.00015	2.5	6/18/2015	RUF	N5506
Indeno(1,2,3-cd)pyrene	<1	<1	<1	<0.00042	<0.000037	1	6/18/2015	RUF	N5506
Naphthalene	<5	<5	<5	<0.0021	<0.00040	5	6/18/2015	RUF	N5506
Phenanthrene	<2.5	<2.5	<2.5	<0.0010	<0.00014	2.5	6/18/2015	RUF	N5506
Pyrene	<1	<1	<1	<0.00042	<0.000050	1	6/18/2015	RUF	N5506

Qualifiers:

< Less than the indicated limit of detection (LOD)

H Holding time for preparation or analysis

B Analyte detected in the associated Method Blank

(a) Analysis indicates possible breakthrough; back section result is greater than

30 % of the front section result.

Analytical Environmental Services, Inc
Date: 22-Jun-15

Client:	Oneida Total Integrated Enterprises	Client Sample ID:	STAGING BAP 13
Lab Order	1506I55	Tag Number:	
Project Name:	35 Avenue Removal	Collection Date:	6/16/2015
Lab ID:	1506I55-001A	Matrix:	Air

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
NIOSH 5506 (N5506)									
1-Methylnaphthalene	BRL		0.20	5.0	ug, Total	209029	1	06/18/2015 23:17	RF
2-Methylnaphthalene	BRL		0.44	5.0	ug, Total	209029	1	06/18/2015 23:17	RF
Acenaphthene	BRL		1.3	5.0	ug, Total	209029	1	06/18/2015 23:17	RF
Acenaphthylene	BRL		0.57	5.0	ug, Total	209029	1	06/18/2015 23:17	RF
Anthracene	BRL		0.030	1.0	ug, Total	209029	1	06/18/2015 23:17	RF
Benzo(a)anthracene	BRL		0.028	0.50	ug, Total	209029	1	06/18/2015 23:17	RF
Benzo(a)pyrene	BRL		0.026	1.0	ug, Total	209029	1	06/18/2015 23:17	RF
Benzo(b)fluoranthene	BRL		0.042	1.0	ug, Total	209029	1	06/18/2015 23:17	RF
Benzo(g,h,i)perylene	BRL		0.077	1.0	ug, Total	209029	1	06/18/2015 23:17	RF
Benzo(k)fluoranthene	BRL		0.027	1.0	ug, Total	209029	1	06/18/2015 23:17	RF
Chrysene	BRL		0.020	1.0	ug, Total	209029	1	06/18/2015 23:17	RF
Dibenz(a,h)anthracene	BRL		0.080	1.0	ug, Total	209029	1	06/18/2015 23:17	RF
Fluoranthene	BRL		0.048	1.0	ug, Total	209029	1	06/18/2015 23:17	RF
Fluorene	BRL		0.064	2.5	ug, Total	209029	1	06/18/2015 23:17	RF
Indeno(1,2,3-cd)pyrene	BRL		0.035	1.0	ug, Total	209029	1	06/18/2015 23:17	RF
Naphthalene	BRL		0.25	5.0	ug, Total	209029	1	06/18/2015 23:17	RF
Phenanthrene	BRL		0.026	2.5	ug, Total	209029	1	06/18/2015 23:17	RF
Pyrene	BRL		0.027	1.0	ug, Total	209029	1	06/18/2015 23:17	RF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not Detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank

- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- > Greater than Result value
- J Estimated value detected below Reporting Limit
- < Less than Result value

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client OTTE

Work Order Number 1506755

Checklist completed by [Signature] Date 6/17/15

Carrier name: FedEx ☒ UPS ☐ Courier ☐ Client ☐ US Mail ☐ Other ☐

Shipping container/cooler in good condition? Yes ☒ No ☐ Not Present ☐

Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Present ☒

Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒

Container/Temp Blank temperature in compliance? ($0^{\circ} \leq 6^{\circ}\text{C}$) * Yes ☒ No ☐

Cooler #1 Amlet Cooler #2 ☐ Cooler #3 ☐ Cooler #4 ☐ Cooler #5 ☐ Cooler #6 ☐

Chain of custody present? Yes ☒ No ☐

Chain of custody signed when relinquished and received? Yes ☒ No ☐

Chain of custody agrees with sample labels? Yes ☒ No ☐

Samples in proper container/bottle? Yes ☒ No ☐

Sample containers intact? Yes ☒ No ☐

Sufficient sample volume for indicated test? Yes ☒ No ☐

All samples received within holding time? Yes ☒ No ☐

Was TAT marked on the COC? Yes ☐ No ☒

Proceed with Standard TAT as per project history? Yes ☒ No ☐ Not Applicable ☐

Water - VOA vials have zero headspace? No VOA vials submitted ☒ Yes ☐ No ☐

Water - pH acceptable upon receipt? Yes ☐ No ☐ Not Applicable ☒

Adjusted? ☐ Checked by ☐

Sample Condition: Good ☒ Other(Explain) ☐

(For diffusive samples or AIHA lead) Is a known blank included? Yes ☐ No ☒

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

Client: Oneida Total Integrated Enterprises
Project Name: 35 Avenue Removal
Workorder: 1506155

ANALYTICAL QC SUMMARY REPORT**BatchID: 209029**

Sample ID: MB-209029					Client ID:		Units: ug, Total		Prep Date: 06/18/2015		Run No: 294257	
SampleType: MBLK					TestCode: NIOSH 5506		BatchID: 209029		Analysis Date: 06/18/2015		Seq No: 6269978	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual	

1-Methylnaphthalene	BRL	5.0									
2-Methylnaphthalene	BRL	5.0									
Acenaphthene	BRL	5.0									
Acenaphthylene	BRL	5.0									
Anthracene	BRL	1.0									
Benzo(a)anthracene	BRL	0.50									
Benzo(a)pyrene	BRL	1.0									
Benzo(b)fluoranthene	BRL	1.0									
Benzo(g,h,i)perylene	BRL	1.0									
Benzo(k)fluoranthene	BRL	1.0									
Chrysene	BRL	1.0									
Dibenz(a,h)anthracene	BRL	1.0									
Fluoranthene	BRL	1.0									
Fluorene	BRL	2.5									
Indeno(1,2,3-cd)pyrene	BRL	1.0									
Naphthalene	BRL	5.0									
Phenanthrene	BRL	2.5									
Pyrene	BRL	1.0									

Sample ID: LCS-209029		Client ID:				Units: ug, Total		Prep Date: 06/18/2015		Run No: 294257		
SampleType: LCS		TestCode: NIOSH 5506				BatchID: 209029		Analysis Date: 06/18/2015		Seq No: 6269979		
Analyte		Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1-Methylnaphthalene	23.94	5.0	25.00		95.8	80.3	120				
2-Methylnaphthalene	23.26	5.0	25.00		93.1	80	120				
Acenaphthene	24.48	5.0	25.00		97.9	80	120				
Acenaphthylene	48.45	5.0	50.00		96.9	80.4	120				

Qualifiers:	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Oneida Total Integrated Enterprises
Project Name: 35 Avenue Removal
Workorder: 1506155

ANALYTICAL QC SUMMARY REPORT**BatchID: 209029**

Sample ID: LCS-209029	Client ID:	Units: ug, Total				Prep Date: 06/18/2015	Run No: 294257				
SampleType: LCS	TestCode: NIOSH 5506	BatchID: 209029				Analysis Date: 06/18/2015	Seq No: 6269979				
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Anthracene	2.041	1.0	2.500		81.7	75	120				
Benzo(a)anthracene	1.979	0.50	2.500		79.2	71.7	120				
Benzo(a)pyrene	1.684	1.0	2.500		67.4	60	120				
Benzo(b)fluoranthene	3.597	1.0	5.000		71.9	66.6	120				
Benzo(g,h,i)perylene	3.092	1.0	5.000		61.8	48.8	120				
Benzo(k)fluoranthene	1.753	1.0	2.500		70.1	64.2	120				
Chrysene	1.980	1.0	2.500		79.2	71	120				
Dibenz(a,h)anthracene	3.333	1.0	5.000		66.7	58.9	120				
Fluoranthene	4.342	1.0	5.000		86.8	76.8	120				
Fluorene	4.836	2.5	5.000		96.7	78	120				
Indeno(1,2,3-cd)pyrene	1.541	1.0	2.500		61.7	55.4	120				
Naphthalene	24.77	5.0	25.00		99.1	80	116				
Phenanthrene	BRL	2.5	2.500		88.5	80	120				
Pyrene	2.062	1.0	2.500		82.5	74.4	120				

Sample ID: LCSD-209029	Client ID:	Units: ug, Total				Prep Date: 06/18/2015	Run No: 294257				
SampleType: LCSD	TestCode: NIOSH 5506	BatchID: 209029				Analysis Date: 06/18/2015	Seq No: 6269980				
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1-Methylnaphthalene	24.09	5.0	25.00		96.4	80.3	120	23.94	0.608	20	
2-Methylnaphthalene	23.34	5.0	25.00		93.4	80	120	23.26	0.335	20	
Acenaphthene	24.68	5.0	25.00		98.7	80	120	24.48	0.815	20	
Acenaphthylene	48.53	5.0	50.00		97.1	80.4	120	48.45	0.162	20	
Anthracene	2.071	1.0	2.500		82.8	75	120	2.041	1.42	20	
Benzo(a)anthracene	2.032	0.50	2.500		81.3	71.7	120	1.979	2.63	20	
Benzo(a)pyrene	1.745	1.0	2.500		69.8	60	120	1.684	3.51	20	
Benzo(b)fluoranthene	3.719	1.0	5.000		74.4	66.6	120	3.597	3.33	20	
Benzo(g,h,i)perylene	3.216	1.0	5.000		64.3	48.8	120	3.092	3.93	20.8	

Qualifiers:	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Oneida Total Integrated Enterprises
Project Name: 35 Avenue Removal
Workorder: 1506I55

ANALYTICAL QC SUMMARY REPORT

BatchID: 209029

Sample ID: LCSD-209029		Client ID:			Units: ug, Total			Prep Date: 06/18/2015		Run No: 294257	
SampleType: LCSD		TestCode: NIOSH 5506			BatchID: 209029			Analysis Date: 06/18/2015		Seq No: 6269980	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Benzo(k)fluoranthene	1.813	1.0	2.500		72.5	64.2	120	1.753	3.33	20	
Chrysene	2.030	1.0	2.500		81.2	71	120	1.980	2.49	20	
Dibenz(a,h)anthracene	3.440	1.0	5.000		68.8	58.9	120	3.333	3.15	16.6	
Fluoranthene	4.433	1.0	5.000		88.7	76.8	120	4.342	2.07	20	
Fluorene	4.873	2.5	5.000		97.5	78	120	4.836	0.761	20	
Indeno(1,2,3-cd)pyrene	1.605	1.0	2.500		64.2	55.4	120	1.541	4.03	20	
Naphthalene	24.81	5.0	25.00		99.2	80	116	24.77	0.135	20	
Phenanthrene	BRL	2.5	2.500		89.6	80	120	2.213	0	20	
Pyrene	2.106	1.0	2.500		84.3	74.4	120	2.062	2.15	20	

Qualifiers:	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

July 28, 2015

Russell Henderson
Oneida Total Integrated Enterprises
1220 Kennestone Circle, Suite 106
Marietta GA 30066

TEL: (678) 355-5550
FAX: (414) 257-2492

RE: 35th Avenue Removal

Dear Russell Henderson:

Order No: 1507175

Analytical Environmental Services, Inc. received 2 samples on 7/22/2015 10:30:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

- NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/15-06/30/16.
- AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Dorothy deBruyn
Project Manager

3080 Presidential Drive, Atlanta, GA 30340-3704
Tel.: (770) 457-8177 (800) 972-4889
www.aesatlanta.com

Client Name: OTIE Contact: Russell Henderson
Address: 1220 Kennestone Circle Phone: 678-255-6191
Marietta GA 30066 Fax:

Project Name/#: 35th Ave Removal
 Samplers Name: Dag Freley
 Sampling Date: 7/21/2015

[illegible]

Normal (5 days):

3 Days Rush:



2 Days Rush:



Next Day Rush:

Relinquished By:

Received By:

Relinquished By:

Received By:

Date/Time

Date/Time

Date/Time

Date/Time

Delivered Direct to Lab:

☒

Shipped:



Method of Shipment:

Lab Recipient:

Date:

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE FOLLOWING BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.

Analytical Results**for****Oneida Total Integrated Enterprises****Date:** 28-Jul-15**Workorder:** 1507175**Client Reference:** 35th Avenue Removal

Analyte	Concentration			Limit of Detection (ug)	Qual	Date Analyzed /Analyst	Test Method
	Total (ug)	(mg/m3)	(ppm)				
Client ID: CV0790-AS01	Lab ID: 1507175-001A	Date Sampled: 7/21/2015	Media: Filter	Air Vol.(L): 1826			
Arsenic	<0.4	<0.000219	0.4	7/24/2015	MR	N7300	
Lead	<0.2	<0.000110	0.2	7/24/2015	MR	N7300	
Client ID: STAGING-AS26	Lab ID: 1507175-002A	Date Sampled: 7/21/2015	Media: Filter	Air Vol.(L): 1809			
Arsenic	<0.4	<0.000221	0.4	7/24/2015	MR	N7300	
Lead	<0.2	<0.000111	0.2	7/24/2015	MR	N7300	

Qualifiers:

General Notes:

< Less than the indicated limit of detection (LOD)

Results are blank corrected where applicable

Page 3 of 7

H Holding time for preparation or analysis

Analytical Environmental Services, Inc
Date: 28-Jul-15

Client:	Oneida Total Integrated Enterprises	Client Sample ID:	CV0790-AS01
Lab Order	1507175	Tag Number:	
Project Name:	35th Avenue Removal	Collection Date:	7/21/2015
Lab ID:	1507175-001A	Matrix:	Air

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
NIOSH 7300/7303				(N7300)					
Arsenic	BRL		0.12	0.40	ug, Total	210545	1	07/24/2015 21:04	MR
Lead	0.08	J	0.04	0.20	ug, Total	210545	1	07/24/2015 21:04	MR

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not Detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank

- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- > Greater than Result value
- J Estimated value detected below Reporting Limit
- < Less than Result value

Analytical Environmental Services, Inc**Date:** 28-Jul-15

Client:	Oneida Total Integrated Enterprises	Client Sample ID:	STAGING-AS26
Lab Order	1507175	Tag Number:	
Project Name:	35th Avenue Removal	Collection Date:	7/21/2015
Lab ID:	1507175-002A	Matrix:	Air

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
NIOSH 7300/7303				(N7300)					
Arsenic	BRL		0.12	0.40	ug, Total	210545	1	07/24/2015 21:07	MR
Lead	BRL		0.04	0.20	ug, Total	210545	1	07/24/2015 21:07	MR

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not Detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank

- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- > Greater than Result value
- J Estimated value detected below Reporting Limit
- < Less than Result value

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client OTIE

Work Order Number 1507I75

Checklist completed by Katie Fourn 7/22/15
Signature Date

Carrier name: FedEx ☒ UPS ☐ Courier ☐ Client ☐ US Mail ☐ Other ☐

Shipping container/cooler in good condition? Yes ☒ No ☐ Not Present ☐

Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Present ☒

Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒

Container/Temp Blank temperature in compliance? ^{KF 7/22} (02-6°C)* Yes ☒ No ☐

Cooler #1 Amb Cooler #2 ☐ Cooler #3 ☐ Cooler #4 ☐ Cooler #5 ☐ Cooler #6 ☐

Chain of custody present? Yes ☒ No ☐

Chain of custody signed when relinquished and received? Yes ☒ No ☐

Chain of custody agrees with sample labels? Yes ☒ No ☐

Samples in proper container/bottle? Yes ☒ No ☐

Sample containers intact? Yes ☒ No ☐

Sufficient sample volume for indicated test? Yes ☒ No ☐

All samples received within holding time? Yes ☒ No ☐

Was TAT marked on the COC? Yes ☐ No ☒

Proceed with Standard TAT as per project history? Yes ☒ No ☐ Not Applicable ☐

Water - VOA vials have zero headspace? No VOA vials submitted ☒ Yes ☐ No ☐

Water - pH acceptable upon receipt? Yes ☐ No ☐ Not Applicable ☒

Adjusted? ☐ Checked by ☐

Sample Condition: Good ☒ Other(Explain) ☐

(For diffusive samples or AIHA lead) Is a known blank included? Yes ☐ No ☒

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

Client: Oneida Total Integrated Enterprises
Project Name: 35th Avenue Removal
Workorder: 1507175

ANALYTICAL QC SUMMARY REPORT

BatchID: 210545

Sample ID: MB-210545					Client ID:			Units: ug, Total		Prep Date: 07/23/2015		Run No: 296657	
SampleType: MBLK					TestCode: NIOSH 7300/7303			BatchID: 210545		Analysis Date: 07/24/2015		Seq No: 6328248	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual		

Arsenic BRL 0.40
Lead BRL 0.20

Sample ID: LCS-210545	Client ID:					Units: ug, Total	Prep Date: 07/23/2015	Run No: 296657			
SampleType: LCS	TestCode: NIOSH 7300/7303					BatchID: 210545	Analysis Date: 07/24/2015	Seq No: 6328249			
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Arsenic 51.80 2.00 50.00 104 79.5 120
Lead 52.67 1.00 50.00 105 84.8 120

Sample ID: LCSD-210545					Client ID:		Units: ug, Total		Prep Date: 07/23/2015		Run No: 296657	
SampleType: LCSD					TestCode: NIOSH 7300/7303		BatchID: 210545		Analysis Date: 07/24/2015		Seq No: 6328250	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual	

Arsenic 52.49 2.00 50.00 105 79.5 120 51.80 1.33 20
Lead 53.09 1.00 50.00 106 84.8 120 52.67 0.795 20

Qualifiers:	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

May 11, 2015

Russell Henderson
Oneida Total Integrated Enterprises
1220 Kennestone Circle, Suite 106
Marietta GA 30066

TEL: (678) 355-5550

FAX: (414) 257-2492

RE: 35th Ave Removal

Dear Russell Henderson:

Order No: 1505281

Analytical Environmental Services, Inc. received 1 samples on 5/4/2015 2:15:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

- NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
- AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Dorothy deBruvn
Project Manager

3080 Presidential Drive, Atlanta, GA 30340-3704

Tel.: (770) 457-8177 (800) 972-4889

www.aesatlanta.com

150528

Client Name: OTIE Contact: RUSSEN HENDERSON
Address: 1220 KENNESAW GLEN Phone: 678-355-5550
MARIETTA, GA 30066 Fax:

Project Name/ #: ~~X~~ 35th ARE Removal

Samplers Name: JERRY BARTAP

Sampling Date: 4/27/15

[illegible]

Normal (5 days):



3 Days Rush:

10




2 Days Rush:



Next Day Rush:

24

Comments:

Relinquished By:		Date/Time	5/4/15 0900
Received By:		Date/Time	5-4-15 12:29
Relinquished By:		Date/Time	5-4-15 14:11
Received By:		Date/Time	

Delivered Direct to Lab:

7

Shipped:



Method of Shipment:

Lab Recipient:

Date:

Covered

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SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE FOLLOWING BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.

Analytical Results

for

Oneida Total Integrated Enterprises

Date: 11-May-15

Workorder: 1505281

Client Reference: 35th Ave Removal

Analyte	Concentration					Limit of Detection (ug)	Qual	Date Analyzed /Analyst	Test Method
	Total (ug)	Front (ug)	Back (ug)	(mg/m3)	(ppm)				
Client ID: CV0793B-BAP12 Lab ID: 1505281-001A Date Sampled: 4/27/2015 Media: Filter/Charcoal Air Vol.(L): 3510									
1-Methylnaphthalene	<5	<5	<5	<0.0014	<0.00024	5		5/8/2015	RUF N5506
2-Methylnaphthalene	<5	<5	<5	<0.0014	<0.00024	5		5/8/2015	RUF N5506
Acenaphthene	<5	<5	<5	<0.0014	<0.00023	5		5/8/2015	RUF N5506
Acenaphthylene	<5	<5	<5	<0.0014	<0.00023	5		5/8/2015	RUF N5506
Anthracene	<1	<1	<1	<0.00028	<0.000039	1		5/8/2015	RUF N5506
Benzo(a)anthracene	<0.5	<0.5	<0.5	<0.00014	<0.000015	0.5		5/8/2015	RUF N5506
Benzo(a)pyrene	<1	<1	<1	<0.00028	<0.000028	1		5/8/2015	RUF N5506
Benzo(b)fluoranthene	<1	<1	<1	<0.00028	<0.000028	1		5/8/2015	RUF N5506
Benzo(g,h,i)perylene	<1	<1	<1	<0.00028	<0.000025	1		5/8/2015	RUF N5506
Benzo(k)fluoranthene	<1	<1	<1	<0.00028	<0.000028	1		5/8/2015	RUF N5506
Chrysene	<1	<1	<1	<0.00028	<0.000030	1		5/8/2015	RUF N5506
Dibenz(a,h)anthracene	<1	<1	<1	<0.00028	<0.000025	1		5/8/2015	RUF N5506
Fluoranthene	<1	<1	<1	<0.00028	<0.000034	1		5/8/2015	RUF N5506
Fluorene	<2.5	<2.5	<2.5	<0.00071	<0.00010	2.5		5/8/2015	RUF N5506
Indeno(1,2,3-cd)pyrene	<1	<1	<1	<0.00028	<0.000025	1		5/8/2015	RUF N5506
Naphthalene	<5	<5	<5	<0.0014	<0.00027	5		5/8/2015	RUF N5506
Phenanthrene	<2.5	<2.5	<2.5	<0.00071	<0.000098	2.5		5/8/2015	RUF N5506
Pyrene	<1	<1	<1	<0.00028	<0.000034	1		5/8/2015	RUF N5506

Qualifiers:

< Less than the indicated limit of detection (LOD)

H Holding time for preparation or analysis

B Analyte detected in the associated Method Blank

(a) Analysis indicates possible breakthrough; back section result is greater than

30 % of the front section result.

Analytical Environmental Services, Inc
Date: 11-May-15

Client: Oneida Total Integrated Enterprises
Project Name: 35th Ave Removal
Lab ID: 1505281-001

Client Sample ID: CV0793B-BAP12
Collection Date: 4/27/2015 4:00:00 PM
Matrix: Air

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
NIOSH 5506				(N5506)					
1-Methylnaphthalene	BRL		0.20	5.0	ug, Total	207081	1	05/08/2015 16:23	RF
2-Methylnaphthalene	BRL		0.44	5.0	ug, Total	207081	1	05/08/2015 16:23	RF
Acenaphthene	BRL		1.3	5.0	ug, Total	207081	1	05/08/2015 16:23	RF
Acenaphthylene	BRL		0.57	5.0	ug, Total	207081	1	05/08/2015 16:23	RF
Anthracene	BRL		0.030	1.0	ug, Total	207081	1	05/08/2015 16:23	RF
Benzo(a)anthracene	BRL		0.028	0.50	ug, Total	207081	1	05/08/2015 16:23	RF
Benzo(a)pyrene	BRL		0.026	1.0	ug, Total	207081	1	05/08/2015 16:23	RF
Benzo(b)fluoranthene	BRL		0.042	1.0	ug, Total	207081	1	05/08/2015 16:23	RF
Benzo(g,h,i)perylene	BRL		0.077	1.0	ug, Total	207081	1	05/08/2015 16:23	RF
Benzo(k)fluoranthene	BRL		0.027	1.0	ug, Total	207081	1	05/08/2015 16:23	RF
Chrysene	BRL		0.020	1.0	ug, Total	207081	1	05/08/2015 16:23	RF
Dibenz(a,h)anthracene	BRL		0.080	1.0	ug, Total	207081	1	05/08/2015 16:23	RF
Fluoranthene	BRL		0.048	1.0	ug, Total	207081	1	05/08/2015 16:23	RF
Fluorene	BRL		0.064	2.5	ug, Total	207081	1	05/08/2015 16:23	RF
Indeno(1,2,3-cd)pyrene	BRL		0.035	1.0	ug, Total	207081	1	05/08/2015 16:23	RF
Naphthalene	BRL		0.25	5.0	ug, Total	207081	1	05/08/2015 16:23	RF
Phenanthrene	BRL		0.026	2.5	ug, Total	207081	1	05/08/2015 16:23	RF
Pyrene	BRL		0.027	1.0	ug, Total	207081	1	05/08/2015 16:23	RF

Qualifiers: * Value exceeds maximum contaminant level
 BRL Not detected at MDL
 H Holding times for preparation or analysis exceeded
 N Analyte not NELAC certified
 B Analyte detected in the associated method blank
 NC Not confirmed

E Estimated value above quantitation range
 S Spike Recovery outside limits due to matrix
 J Estimated value detected below Reporting Limit
 > Greater than Result value
 < Less than Result value
 Narr See case narrative

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client OTIE

Work Order Number 1505281

Checklist completed by Mary 5/14/15
Signature Date

Carrier name: FedEx ☐ UPS ☐ Courier ☒ Client ☐ US Mail ☐ Other ☐

Shipping container/cooler in good condition? Yes ☒ No ☐ Not Present ☐

Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Present ☒

Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒

Container/Temp Blank temperature in compliance? ($0^{\circ} \leq 6^{\circ}C$) * Yes ☒ No ☐

Cooler #1 Ambut Cooler #2 ☐ Cooler #3 ☐ Cooler #4 ☐ Cooler #5 ☐ Cooler #6 ☐

Chain of custody present? Yes ☒ No ☐

Chain of custody signed when relinquished and received? Yes ☒ No ☐

Chain of custody agrees with sample labels? Yes ☒ No ☐

Samples in proper container/bottle? Yes ☒ No ☐

Sample containers intact? Yes ☒ No ☐

Sufficient sample volume for indicated test? Yes ☒ No ☐

All samples received within holding time? Yes ☒ No ☐

Was TAT marked on the COC? Yes ☒ No ☐

Proceed with Standard TAT as per project history? Yes ☐ No ☐ Not Applicable ☒

Water - VOA vials have zero headspace? No VOA vials submitted ☒ Yes ☐ No ☐

Water - pH acceptable upon receipt? Yes ☐ No ☐ Not Applicable ☒

Adjusted? ☐ Checked by ☐
Sample Condition: Good ☒ Other(Explain) ☐

(For diffusive samples or AIHA lead) Is a known blank included? Yes ☐ No ☒

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\\Sample Receipt\\My Documents\\COCs and pH Adjustment Sheet\\Sample_Cooler_Receipt_Checklist_Rev1.rtf

Client: Oneida Total Integrated Enterprises
Project Name: 35th Ave Removal
Workorder: 1505281

ANALYTICAL QC SUMMARY REPORT**BatchID: 207081**

Sample ID: MB-207081	Client ID:	Units: ug, Total				Prep Date: 05/07/2015	Run No: 291435				
SampleType: MBLK	TestCode: NIOSH 5506	BatchID: 207081				Analysis Date: 05/08/2015	Seq No: 6201879				
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1-Methylnaphthalene	BRL	5.0									
2-Methylnaphthalene	BRL	5.0									
Acenaphthene	BRL	5.0									
Acenaphthylene	BRL	5.0									
Anthracene	BRL	1.0									
Benzo(a)anthracene	BRL	0.50									
Benzo(a)pyrene	BRL	1.0									
Benzo(b)fluoranthene	BRL	1.0									
Benzo(g,h,i)perylene	BRL	1.0									
Benzo(k)fluoranthene	BRL	1.0									
Chrysene	BRL	1.0									
Dibenz(a,h)anthracene	BRL	1.0									
Fluoranthene	BRL	1.0									
Fluorene	BRL	2.5									
Indeno(1,2,3-cd)pyrene	BRL	1.0									
Naphthalene	BRL	5.0									
Phenanthrene	BRL	2.5									
Pyrene	BRL	1.0									

Sample ID: LCS-207081	Client ID:				Units: ug, Total	Prep Date: 05/07/2015	Run No: 291435				
SampleType: LCS	TestCode: NIOSH 5506				BatchID: 207081	Analysis Date: 05/08/2015	Seq No: 6201880				
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1-Methylnaphthalene	23.36	5.0	25.00		93.5	80.3	120				
2-Methylnaphthalene	22.92	5.0	25.00		91.7	80	120				
Acenaphthene	23.76	5.0	25.00		95.0	80	120				
Acenaphthylene	47.74	5.0	50.00		95.5	80.4	120				

Qualifiers:	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Oneida Total Integrated Enterprises
Project Name: 35th Ave Removal
Workorder: 1505281

ANALYTICAL QC SUMMARY REPORT**BatchID: 207081**

Sample ID: LCS-207081		Client ID:		Units: ug, Total		Prep Date: 05/07/2015		Run No: 291435			
SampleType: LCS		TestCode: NIOSH 5506		BatchID: 207081		Analysis Date: 05/08/2015		Seq No: 6201880			
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Anthracene	2.047	1.0	2.500		81.9	75	120				
Benzo(a)anthracene	2.026	0.50	2.500		81.0	71.7	120				
Benzo(a)pyrene	1.825	1.0	2.500		73.0	60	120				
Benzo(b)fluoranthene	3.880	1.0	5.000		77.6	66.6	120				
Benzo(g,h,i)perylene	3.199	1.0	5.000		64.0	48.8	120				
Benzo(k)fluoranthene	1.886	1.0	2.500		75.4	64.2	120				
Chrysene	2.017	1.0	2.500		80.7	71	120				
Dibenz(a,h)anthracene	3.639	1.0	5.000		72.8	58.9	120				
Fluoranthene	4.391	1.0	5.000		87.8	76.8	120				
Fluorene	4.705	2.5	5.000		94.1	78	120				
Indeno(1,2,3-cd)pyrene	1.583	1.0	2.500		63.3	55.4	120				
Naphthalene	24.34	5.0	25.00		97.4	80	116				
Phenanthrene	BRL	2.5	2.500		90.8	80	120				
Pyrene	1.999	1.0	2.500		80.0	74.4	120				

Sample ID: LCSD-207081	Client ID:				Units: ug, Total	Prep Date: 05/07/2015	Run No: 291435				
SampleType: LCSD	TestCode: NIOSH 5506				BatchID: 207081	Analysis Date: 05/08/2015	Seq No: 6202101				
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1-Methylnaphthalene	23.51	5.0	25.00		94.0	80.3	120	23.36	0.626	20	
2-Methylnaphthalene	22.95	5.0	25.00		91.8	80	120	22.92	0.115	20	
Acenaphthene	23.91	5.0	25.00		95.6	80	120	23.76	0.643	20	
Acenaphthylene	47.79	5.0	50.00		95.6	80.4	120	47.74	0.122	20	
Anthracene	2.051	1.0	2.500		82.0	75	120	2.047	0.153	20	
Benzo(a)anthracene	2.030	0.50	2.500		81.2	71.7	120	2.026	0.179	20	
Benzo(a)pyrene	1.817	1.0	2.500		72.7	60	120	1.825	0.462	20	
Benzo(b)fluoranthene	3.878	1.0	5.000		77.6	66.6	120	3.880	0.059	20	
Benzo(g,h,i)perylene	3.202	1.0	5.000		64.0	48.8	120	3.199	0.099	20.8	

Qualifiers:	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Oneida Total Integrated Enterprises
Project Name: 35th Ave Removal
Workorder: 1505281

ANALYTICAL QC SUMMARY REPORT

BatchID: 207081

Sample ID: LCSD-207081		Client ID:		Units: ug, Total		Prep Date: 05/07/2015		Run No: 291435			
SampleType: LCSD		TestCode: NIOSH 5506		BatchID: 207081		Analysis Date: 05/08/2015		Seq No: 6202101			
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Benzo(k)fluoranthene	1.889	1.0	2.500		75.6	64.2	120	1.886	0.171	20	
Chrysene	2.019	1.0	2.500		80.8	71	120	2.017	0.098	20	
Dibenz(a,h)anthracene	3.600	1.0	5.000		72.0	58.9	120	3.639	1.07	16.6	
Fluoranthene	4.437	1.0	5.000		88.7	76.8	120	4.391	1.04	20	
Fluorene	4.722	2.5	5.000		94.4	78	120	4.705	0.364	20	
Indeno(1,2,3-cd)pyrene	1.580	1.0	2.500		63.2	55.4	120	1.583	0.243	20	
Naphthalene	24.39	5.0	25.00		97.6	80	116	24.34	0.198	20	
Phenanthrene	BRL	2.5	2.500		91.2	80	120	2.270	0	20	
Pyrene	2.062	1.0	2.500		82.5	74.4	120	1.999	3.10	20	

Qualifiers:	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

June 11, 2015

Russell Henderson
Oneida Total Integrated Enterprises
1220 Kennestone Circle, Suite 106
Marietta GA 30066

TEL: (678) 355-5550
FAX: (414) 257-2492

RE: 35 Avenue Removal

Dear Russell Henderson:

Order No: 1506851

Analytical Environmental Services, Inc. received 1 samples on 6/5/2015 10:25:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

- NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
- AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Dorothy deBruyn
Project Manager

Analytical Results

for

Oneida Total Integrated Enterprises

Date: 11-Jun-15

Workorder: 1506851

Client Reference: 35 Avenue Removal

Analyte	Concentration					Limit of Detection (ug)	Qual	Date Analyzed /Analyst	Test Method
	Total (ug)	Front (ug)	Back (ug)	(mg/m3)	(ppm)				
Client ID: CV0254B-BaP Lab ID: 1506851-001A Date Sampled: 6/4/2015 Media: Filter/Charcoal Air Vol.(L): 2400									
1-Methylnaphthalene	<5	<5	<5	<0.0021	<0.00036	5	6/9/2015	RUF	N5506
2-Methylnaphthalene	<5	<5	<5	<0.0021	<0.00036	5	6/9/2015	RUF	N5506
Acenaphthene	<5	<5	<5	<0.0021	<0.00033	5	6/9/2015	RUF	N5506
Acenaphthylene	<5	<5	<5	<0.0021	<0.00034	5	6/9/2015	RUF	N5506
Anthracene	<1	<1	<1	<0.00042	<0.000057	1	6/9/2015	RUF	N5506
Benzo(a)anthracene	<0.5	<0.5	<0.5	<0.00021	<0.000022	0.5	6/9/2015	RUF	N5506
Benzo(a)pyrene	<1	<1	<1	<0.00042	<0.000040	1	6/9/2015	RUF	N5506
Benzo(b)fluoranthene	<1	<1	<1	<0.00042	<0.000040	1	6/9/2015	RUF	N5506
Benzo(g,h,i)perylene	<1	<1	<1	<0.00042	<0.000037	1	6/9/2015	RUF	N5506
Benzo(k)fluoranthene	<1	<1	<1	<0.00042	<0.000040	1	6/9/2015	RUF	N5506
Chrysene	<1	<1	<1	<0.00042	<0.000045	1	6/9/2015	RUF	N5506
Dibenz(a,h)anthracene	<1	<1	<1	<0.00042	<0.000037	1	6/9/2015	RUF	N5506
Fluoranthene	<1	<1	<1	<0.00042	<0.000050	1	6/9/2015	RUF	N5506
Fluorene	<2.5	<2.5	<2.5	<0.0010	<0.00015	2.5	6/9/2015	RUF	N5506
Indeno(1,2,3-cd)pyrene	<1	<1	<1	<0.00042	<0.000037	1	6/9/2015	RUF	N5506
Naphthalene	<5	<5	<5	<0.0021	<0.00040	5	6/9/2015	RUF	N5506
Phenanthrene	<2.5	<2.5	<2.5	<0.0010	<0.00014	2.5	6/9/2015	RUF	N5506
Pyrene	<1	<1	<1	<0.00042	<0.000050	1	6/9/2015	RUF	N5506

Qualifiers:

< Less than the indicated limit of detection (LOD)

H Holding time for preparation or analysis

B Analyte detected in the associated Method Blank

(a) Analysis indicates possible breakthrough; back section result is greater than

30 % of the front section result.

Analytical Environmental Services, Inc

Date: 11-Jun-15

Client: Oneida Total Integrated Enterprises
Lab Order 1506851
Project Name: 35 Avenue Removal
Lab ID: 1506851-001A

Client Sample ID: CV0254B-BaP
Tag Number:
Collection Date: 6/4/2015
Matrix: Air

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
NIOSH 5506 (N5506)									
1-Methylnaphthalene	BRL		0.20	5.0	ug, Total	208557	1	06/09/2015 21:32	RF
2-Methylnaphthalene	BRL		0.44	5.0	ug, Total	208557	1	06/09/2015 21:32	RF
Acenaphthene	BRL		1.3	5.0	ug, Total	208557	1	06/09/2015 21:32	RF
Acenaphthylene	BRL		0.57	5.0	ug, Total	208557	1	06/09/2015 21:32	RF
Anthracene	BRL		0.030	1.0	ug, Total	208557	1	06/09/2015 21:32	RF
Benzo(a)anthracene	BRL		0.028	0.50	ug, Total	208557	1	06/09/2015 21:32	RF
Benzo(a)pyrene	BRL		0.026	1.0	ug, Total	208557	1	06/09/2015 21:32	RF
Benzo(b)fluoranthene	BRL		0.042	1.0	ug, Total	208557	1	06/09/2015 21:32	RF
Benzo(g,h,i)perylene	BRL		0.077	1.0	ug, Total	208557	1	06/09/2015 21:32	RF
Benzo(k)fluoranthene	BRL		0.027	1.0	ug, Total	208557	1	06/09/2015 21:32	RF
Chrysene	BRL		0.020	1.0	ug, Total	208557	1	06/09/2015 21:32	RF
Dibenz(a,h)anthracene	BRL		0.080	1.0	ug, Total	208557	1	06/09/2015 21:32	RF
Fluoranthene	BRL		0.048	1.0	ug, Total	208557	1	06/09/2015 21:32	RF
Fluorene	BRL		0.064	2.5	ug, Total	208557	1	06/09/2015 21:32	RF
Indeno(1,2,3-cd)pyrene	BRL		0.035	1.0	ug, Total	208557	1	06/09/2015 21:32	RF
Naphthalene	BRL		0.25	5.0	ug, Total	208557	1	06/09/2015 21:32	RF
Phenanthrene	BRL		0.026	2.5	ug, Total	208557	1	06/09/2015 21:32	RF
Pyrene	BRL		0.027	1.0	ug, Total	208557	1	06/09/2015 21:32	RF

Qualifiers: * Value exceeds maximum contaminant level
 BRL Not Detected at MDL
 H Holding times for preparation or analysis exceeded
 N Analyte not NELAC certified
 B Analyte detected in the associated method blank

E Estimated value above quantitation range
 S Spike Recovery outside limits due to matrix
 > Greater than Result value
 J Estimated value detected below Reporting Limit
 < Less than Result value

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client OTIE

Work Order Number 1506851

Checklist completed by Tamara Delos 4/8/15
Signature Date

Carrier name: FedEx ☒ UPS ☐ Courier ☐ Client ☐ US Mail ☐ Other ☐

Shipping container/cooler in good condition? Yes ☒ No ☐ Not Present ☐

Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Present ☒

Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒

Container/Temp Blank temperature in compliance? 78.6/8.5 (0°-6°C)* Yes ☒ No ☐

Cooler #1 amb Cooler #2 ☐ Cooler #3 ☐ Cooler #4 ☐ Cooler#5 ☐ Cooler #6 ☐

Chain of custody present? Yes ☒ No ☐

Chain of custody signed when relinquished and received? Yes ☒ No ☐

Chain of custody agrees with sample labels? Yes ☒ No ☐

Samples in proper container/bottle? Yes ☒ No ☐

Sample containers intact? Yes ☒ No ☐

Sufficient sample volume for indicated test? Yes ☒ No ☐

All samples received within holding time? Yes ☒ No ☐

Was TAT marked on the COC? Yes ☒ No ☐

Proceed with Standard TAT as per project history? Yes ☐ No ☐ Not Applicable ☒

Water - VOA vials have zero headspace? No VOA vials submitted ☒ Yes ☐ No ☐

Water - pH acceptable upon receipt? Yes ☐ No ☐ Not Applicable ☒

Adjusted? ☐ Checked by ☐

Sample Condition: Good ☒ Other(Explain) ☐

(For diffusive samples or AIHA lead) Is a known blank included? Yes ☐ No ☒

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

Client: Oneida Total Integrated Enterprises
Project Name: 35 Avenue Removal
Workorder: 1506851

ANALYTICAL QC SUMMARY REPORT

BatchID: 208557

Sample ID: MB-208557					Client ID:			Units: ug, Total		Prep Date: 06/09/2015		Run No: 293538	
SampleType: MBLK					TestCode: NIOSH 5506			BatchID: 208557		Analysis Date: 06/09/2015		Seq No: 6253488	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual		

1-Methylnaphthalene	BRL	5.0									
2-Methylnaphthalene	BRL	5.0									
Acenaphthene	BRL	5.0									
Acenaphthylene	BRL	5.0									
Anthracene	BRL	1.0									
Benzo(a)anthracene	BRL	0.50									
Benzo(a)pyrene	BRL	1.0									
Benzo(b)fluoranthene	BRL	1.0									
Benzo(g,h,i)perylene	BRL	1.0									
Benzo(k)fluoranthene	BRL	1.0									
Chrysene	BRL	1.0									
Dibenz(a,h)anthracene	BRL	1.0									
Fluoranthene	BRL	1.0									
Fluorene	BRL	2.5									
Indeno(1,2,3-cd)pyrene	BRL	1.0									
Naphthalene	BRL	5.0									
Phenanthrene	BRL	2.5									
Pyrene	BRL	1.0									

Sample ID: LCS-208557					Client ID:		Units: ug, Total		Prep Date: 06/09/2015		Run No: 293538	
SampleType: LCS					TestCode: NIOSH 5506		BatchID: 208557		Analysis Date: 06/09/2015		Seq No: 6253490	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual	

1-Methylnaphthalene	23.89	5.0	25.00		95.6	80.3	120				
2-Methylnaphthalene	23.25	5.0	25.00		93.0	80	120				
Acenaphthene	24.72	5.0	25.00		98.9	80	120				
Acenaphthylene	48.35	5.0	50.00		96.7	80.4	120				

Qualifiers:	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Oneida Total Integrated Enterprises
Project Name: 35 Avenue Removal
Workorder: 1506851

ANALYTICAL QC SUMMARY REPORT**BatchID: 208557**

Sample ID: LCS-208557	Client ID:	Units: ug, Total				Prep Date: 06/09/2015	Run No: 293538				
SampleType: LCS	TestCode: NIOSH 5506	BatchID: 208557				Analysis Date: 06/09/2015	Seq No: 6253490				
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Anthracene	2.071	1.0	2.500		82.8	75	120				
Benzo(a)anthracene	2.059	0.50	2.500		82.3	71.7	120				
Benzo(a)pyrene	1.714	1.0	2.500		68.6	60	120				
Benzo(b)fluoranthene	3.823	1.0	5.000		76.5	66.6	120				
Benzo(g,h,i)perylene	3.255	1.0	5.000		65.1	48.8	120				
Benzo(k)fluoranthene	1.868	1.0	2.500		74.7	64.2	120				
Chrysene	2.051	1.0	2.500		82.0	71	120				
Dibenz(a,h)anthracene	3.551	1.0	5.000		71.0	58.9	120				
Fluoranthene	4.451	1.0	5.000		89.0	76.8	120				
Fluorene	4.851	2.5	5.000		97.0	78	120				
Indeno(1,2,3-cd)pyrene	1.667	1.0	2.500		66.7	55.4	120				
Naphthalene	24.48	5.0	25.00		97.9	80	116				
Phenanthrene	BRL	2.5	2.500		89.9	80	120				
Pyrene	2.118	1.0	2.500		84.7	74.4	120				

Sample ID: LCSD-208557	Client ID:				Units: ug, Total	Prep Date: 06/09/2015	Run No: 293538				
SampleType: LCSD	TestCode: NIOSH 5506				BatchID: 208557	Analysis Date: 06/09/2015	Seq No: 6253491				
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1-Methylnaphthalene	23.99	5.0	25.00		95.9	80.3	120	23.89	0.404	20	
2-Methylnaphthalene	23.26	5.0	25.00		93.1	80	120	23.25	0.073	20	
Acenaphthene	24.74	5.0	25.00		99.0	80	120	24.72	0.056	20	
Acenaphthylene	48.55	5.0	50.00		97.1	80.4	120	48.35	0.408	20	
Anthracene	2.071	1.0	2.500		82.9	75	120	2.071	0.025	20	
Benzo(a)anthracene	2.072	0.50	2.500		82.9	71.7	120	2.059	0.628	20	
Benzo(a)pyrene	1.703	1.0	2.500		68.1	60	120	1.714	0.648	20	
Benzo(b)fluoranthene	3.813	1.0	5.000		76.3	66.6	120	3.823	0.279	20	
Benzo(g,h,i)perylene	3.208	1.0	5.000		64.2	48.8	120	3.255	1.46	20.8	

Qualifiers:	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Oneida Total Integrated Enterprises
Project Name: 35 Avenue Removal
Workorder: 1506851

ANALYTICAL QC SUMMARY REPORT

BatchID: 208557

Sample ID: LCSD-208557	Client ID:	Units: ug, Total				Prep Date: 06/09/2015	Run No: 293538				
SampleType: LCSD	TestCode: NIOSH 5506	BatchID: 208557				Analysis Date: 06/09/2015	Seq No: 6253491				
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Benzo(k)fluoranthene	1.866	1.0	2.500		74.7	64.2	120	1.868	0.083	20	
Chrysene	2.060	1.0	2.500		82.4	71	120	2.051	0.457	20	
Dibenz(a,h)anthracene	3.520	1.0	5.000		70.4	58.9	120	3.551	0.875	16.6	
Fluoranthene	4.474	1.0	5.000		89.5	76.8	120	4.451	0.531	20	
Fluorene	4.854	2.5	5.000		97.1	78	120	4.851	0.056	20	
Indeno(1,2,3-cd)pyrene	1.650	1.0	2.500		66.0	55.4	120	1.667	1.00	20	
Naphthalene	24.60	5.0	25.00		98.4	80	116	24.48	0.493	20	
Phenanthrene	BRL	2.5	2.500		90.0	80	120	2.248	0	20	
Pyrene	2.116	1.0	2.500		84.6	74.4	120	2.118	0.125	20	

Qualifiers:	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		